Psst! Hey mister, wanna buy some seed?

A practical look at the national turfgrass trials and how the lawn care pro can use them

BY CHRIS SANN

You have read all the available information. You've talked to your suppliers. You've requested and received the latest advertising from growers, some of the sales material prominently displaying how certain varieties fared in national turf trials.

Now you are about to make a seed buying decision of several thousand dollars. Is there any good way of determining whether that number-one rated turf seed that you're about to spend good money on is really the best suited variety for your needs?

The answer is yes

The periodically issued National Turfgrass Evaluation Program progress reports contain not only those highly prized turfgrass quality rating lists—

See **SEED** on page 15

LAWN CARE INDUSTRY
Serving the needs of the professional lawn care operator

SEPTEMBER 1991 VOLUME 15 NUMBER 9

No quick fixes for turf waste

Letting grass clippings lie where they fall, doesn't please some clients, report LCOs

BY JAMES E. GUYETTE

Composting may be an alternative for turf managers who wonder where they can put their yard wastes. The concern is real as more and more landfills refuse this type of refuse.

For some, the movement to encourage customers to let clippings lie just doesn't fly. Plus, there's still the problem of brush disposal.

The mulching mower does not seem to be the ultimate solution to the clipping problem either.

"It doesn't hold true in every situation," says Don Keller, owner of Keller's Tree and Shrub Care Inc., Independence, MO. The planting of zoysiagrass, heavy rainfall or aggressive fertilizing can make trouble for this type of mower.

"Sometimes it works really well and sometimes it doesn't work very well," says Keller.

Other LCOs, those that mow and dispose of clippings, have found farmers willing to accept some turfgrass debris. But there are laws governing even this is some areas.

The problem of lawn wastes, specifically clippings, is growing.

See **FIXES** on page 8

Composting, is it an opportunity to help clients with their grass clipping disposal problems? Pictured here is a sizable commercial operation by the Kurtz Brothers, Cleveland. Photo by Terry McIver.

"Meet the Challenge" in Tampa, FL, Nov. 18-21

TAMPA, FL—*Meet the Challenge* is the theme of the Professional Lawn Care Association of America's 12th annual conference here November 18-21.

The PLCAA conference runs in conjunction with the Green Industry Expo (GIE), the joint trade show of PLCAA, the Associated Landscape Contractors of America and the Professional Grounds Management Society.

The PLCAA conference starts Sunday, Nov. 17, in the new Tampa Convention Center with both morning and afternoon sessions.

A full slate of workshops fill the following Monday, Tuesday and Wednesday.

Monday evening, Nov. 18, all exhibitors and registrants may attend the GIE reception. Tuesday evening there is a new and prospective member reception followed by a live auction.

The conference concludes Thursday, Nov. 21, with an outdoor demonstration of turf and landscape equipment at Horizon Park.

For more information contact PLCAA, 1000 Johnson Ferry Road NE, Suite C135, Marietta, GA 30068. LCI

PLCAA G'cycling plan offered to cities

MARIETTA, GA— A new 20-page Grasscycling Community Action Plan gives members of the Professional Lawn Care Association of America (PLCAA) a way to help cities out of their landfill problems.

The information is designed specifically for local governments. It includes ideas and advice form PLCAA members, the

See **PLAN** on page 16

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ABP BPA

Add Pennsylvania to the growing list of states discovering lawn care as a new tax source. When Gov. Casey signed that state's $14 billion budget in August, it included a new six percent sales tax on professional lawn care services, including mowing and chemical treatments. "Well, at least they might listen to us now," commented Paul DeAngelo, Lawn Specialities, Hazleton. "They estimate they'll get at least $8 million from us."

Bad news for people living in Lyme Disease areas? The New York Department of Environmental Conservation says products containing high percentages of N, N,-diethyl-m-toluamide (DEET) cause rashes on some people. The DEC wants to ban the sale of bug repellents containing more than 30 percent DEET Public health experts say DEET--containing products protect people against the deer tick which carries Lyme Disease. Westchester County, New York, is America's Lyme Disease capital.

California wants legislation to reduce pesticide use in schools. Proposition 65 contains a growing list of substances the state (apart from what the U.S. EPA feels) thinks carries potential risk of cancer or reproductive harm Products on the list, would need a label saying they cannot be used at schools. Included on the list, in addition to pesticides, are many disinfectants and sanitizers.

Say what? The Foliage for Clean Air Council is a non-profit organization. It promotes the use of plants to improve air quality, and recently added four new exterior plants to its list of "clean air machines"—Ligustrum, Photinia, Variegated Liriope and Variegated Pittosporium.

$2.4 million. That's how much officials in Passaic County in northern New Jersey think they can save in landfill costs by convincing the 450,000 people there not to bag their grass clippings. They hope to divert 25,000 tons of clippings from local landfills.

Date change for Gerogia Turfgrass Conference. The 22nd GA conference and show is Dec. 10-12, 1991, at the Georgia International Convention and Trade Center, Hyatt Atlanta Airport. It had been set to start a day earlier but there was a space conflict. Questions? Contact the extension conference office 912/681-5189.

Attention! Karen S. Weber, a former Army public affairs specialist, is the new communications coordinator of the Professional Lawn Care Association of America. Weber is a graduate of the University of Georgia.

The final tally is in: 11 states participated in PLCAA's National Lawn Care Month in 1991 were Alabama, Arkansas, Florida, Georgia, Iowa, Kansas, Massachusetts, Missouri, New York, North Dakota, and Virginia.

Sold out. The Mid-Am Horticultural Trade Show, Jan. 16-18, 1992, at the Hyatt Regency Chicago, sold 66,957 square feet of exhibit space, all that was available.

Help from above. Trimble Navigation, Sunnyvale, CA, says farmers can look to the heavens for guidance—from satellites. The company promotes a system combining computerized maps, infrared photography and scanning devices to pinpoint soil types, crop stress, weed infestations, plant diseases and insect damage. The information is computerized and placed on a tractor equipped with an antenna, which is guided from an unseen satellite to make precise application of materials, says Trimble Navigation.

Just Say No!. Arizona Governor Fife Symington said "NO" to that state's 8 1/2% surtax on "environmentally hazardous" household products which included non-ag pesticides, oven cleaners, spot removers—just about everything with more than a molecule. Industry said the list included lots of things that pose no environmental hazards.

Fresno-based Western Agricultural Publishing Company, which publishes California Landscape Magazine, will now also publish Florida Nurseryman, formerly put out by the Florida Nurserymen and Growers Association (FNGA). The regional publication has about 8,000 monthly readers. LCI

Ariens honored for reducing waste

BRILLION, WI—Mower manufacturer Ariens Company, earned a Wisconsin Business Friend of the Environment Award for its environmental efforts in manufacturing.

The company was recognized for cutting waste disposal by 70%, electricity for lighting by 30%, overall energy consumption by 6% and water use by 60%.

In the manufacturing process, Ariens recycles virtually every scrap of metal and uses only powder coatings which emit no volatile fumes and create less waste. The company also has a recycling program that keeps all paper products from entering the the stream. LCI

TREE SHOW SET

COLUMBUS, OHIO—The second annual trade show of TREE CARE INDUSTRY magazine will be at the Ohio Center here Dec. 5-7.

The seminar program for TCI Expo 91 focuses on management and field personnel too.

Contact Tom Clancy 800-733-2622. LCI

CSMA committee head urges FTC to take lead with environmental claims

WASHINGTON, D.C.—Enforcement of marketing claims should come from the national level and not from each state.

That's part of what Richard Bednarz, representing the chemical industry, told the Federal Trade Commission in hearings earlier this summer.

Bednarz, from Amway Corporation and chairman of a labeling committee for the Chemical Specialty Manufacturers Association, urged the FTC to take the lead in the enforcement of truthful advertising, particularly environmental claims.

"We strongly believe this issue must be addressed immediately," said Bednarz.

The current lack of a standard set of definitions for commonly used terms such as recyclable, recycled content, refillable and reusable has resulted in confusion among consumers as to what these terms mean, and confusion among manufacturers as to which standard or definition to adhere to, testified Bednarz.

He said industry favors general guidelines rather than specific or technical standards.

"Because the technology associated with environmental claims is rapidly changing, guidelines should be flexible enough to be applicable to future claims," said Bednarz.

"The commission should continue with case-by-case investigations and enforcement of the misuse of environmental claims. Investigations should target specific violators," he said.

Endangered Species Act set for '93

ARLINGTON, VA—The national Endangered Species Program should be in place sometime in 1993.

Larry Turner, Ph.D., EPA program manager, told senior golf industry officials at a special forum here earlier this summer the program:

- will rely on county bulletins with maps showing areas where endangered species are present,
- will outline restrictions on chemical use in and around these areas,
- will require that chemical labels tell applicators to consult the county bulletins.

The bulletins, being developed by the U.S. Fish and Wildlife Service, will be available through county extension.

Turner told the representatives of the GCSAA that states will have leeway to develop "landowner agreements" that allow the landowner to work out an ongoing management plan that would not require contacting the extension service before each chemical application. LCI

We might find that we like each other

BY CHRIS SANN

Some golf course superintendents think LCOs are crude, ignorant, ex-used car salesmen who wouldn't know good turf management if it crawled up their pant legs and bit them on their rear ends.

Some LCOs think superintendents are over-paid, prima donnas that live in the rarefied, monied atmosphere of country clubs and wouldn't recognize reality if it ran over them with a Cushman.

The truth is both the LCO and the superintendent have a lot more in common than either admits.

Certainly, you find them in different "theatres", but frequently with basically the same actors and, increasingly, they're following the same script.

It's a tough world

The LCO feels—usually justifiably—that his customers are subjected to the constant pleadings of competitors. The LCO business style, he's convinced himself, is frantic with hardly enough time (or fingers) to plug all the holes in the dike.

On the other hand, the golf course superintendent must listen to a tirade from an idiot brother-in-law, head of the Greens Committee, who blames a missed a putt on the superintendent's turf ineptitude. After all, the brother-in-law, dropped a cool $100 because the putt rolled left.

The superintendent knows he's put upon upon because of the thousands of feet stomping down his prized grass, while every disease passing within 10 miles finds a home on his close-mowed turf.

Despite the differences, both have to deal with product costs doubling in less than 10 years, equipment costs tripling in less than 15, employees with little or no experience who demand ridiculous pay (and show up at their convenience). And, here's the topper: both can't seem to ever dig out from under a growing mountain of paperwork, fallout from a blizzard of federal, state and now local regulations.

So why the crabbing?

Strip away petty jealousies and posturing, carping about motives, condescending attitudes and hurt feelings and we LCOs and superintendents have lots in common.

Both of us are in turf management because we know we contribute something very positive to others. We understand that the turf we manage produces oxygen and humus, traps tons of particulates, filters water of impurities, stabilizes the soil, and absorbs rainfall and dramatically reduces runoff. And we know that healthy, growing turf does all this better than poor turf.

We know these things and we're not even yet addressing the "feel good" issues of turfgrass.

We know in the truest sense that we're ecologists, practicing ecologists.

We know that most of our critics don't understand just how vital "good" turf is to our way of life—ecologically, psychologically, and recreationally.

They don't want to hear. They're not interested in facts at all. Some have agendas, like fund raising and getting elected, etc.

It's time, long overdue, we in the turf management business put aside our differences, whether real or perceived, and speak in a single voice.

There's a lot we can say to challenge half truths, bad science and scare tactics. There's a lot we can do to get fairer representation in the media. Together we can get more of the attention of law makers at every level.

We might even find we like each other.

Chris Sann is operator of Complete Lawn Service, Wilmington, DE. LCI

The end of *LCI* signals beginning of something better

BY RON HALL
editor

At 53° north latitude in late August the sun slips away reluctantly. It leaves with a long sigh.

As events would have it, I'm taking the long way home too, threading through the peaks and crags here in the Canadian Rockies. So impossibly fissured by shadow just an hour earlier, they've faded to profile. They're two dimensional. Like they've been hacked from monstrously large sheets of construction paper. Black paper.

Oh, by the way, this is the final issue of LAWN CARE INDUSTRY. (It's easy to write this one sentence, but it's been agonizingly hard to write this one last column.)

I stop the car on that mountain road —lights off—and step out into the night.

After all I haven't seen another car in, what, 40 minutes? The airport is miles away yet.

I *have* to step out.

Too many thoughts are banging into each other for a share of my consciousness. ("Some things don't have to be remembered.

They remember themselves"—William Least Heat Moon.). This jumble of whatifs and coulduvs is the stuff of long-haul trucking, after the radio is clicked off. Thoughts are coming in all sizes , shapes and colors—thought Polaroids They seep that quickly into focus.

Stretch the legs; uncoil the back; loosen the shoulders.

A bigger picture

I'm seeking a perspective that comes easier with several chestfulls of cool, dry air and even a moment or two of absolutely nothing else.

The night mountain sky is a vast bowl, and, as if a rock had tumbled from the mountain face and landed on my head, I see how incredibly small and interdependent the world is becoming, the political and business worlds particularly. We can thank telecommunication satellites., fiber optics, and micro chips for shrinking these worlds to the size of a pea.

But, more precisely, we can thank common interests.

That, in a very real sense, is why this is the last issue of *LCI*—in this form at least.

We're changing

We think (and from a dollars and cents viewpoint, so do our advertisers) that the LCO is now in the mainstream of the green industry, that the LCO is a vital player in the total landscape services market.

In fact, the term lawn care operator probably isn't accurate anymore. Increasingly, I've become uneasy about using it and have only done so for convenience.

The professional lawn care provider in 1991 is vastly more sophisticated and knowledgeable than he/she was just a few short years ago. The readers of *LCI* are way beyond being described as nozzleheads or spray jockeys. The services they provide are so much more valuable to their clients. I rarely hear these terms used anymore.

Publishing is very much a business too., We must change as you've changed.

Beginning in October, you'll find much of the same information that you've been getting in *LCI* the past 15 years in our sister publication, LANDSCAPE MANAGEMENT.

I'll be one of three editors on that magazine, and LM Editor-in-Chief Jerry Roche's (many of you met him first as editor of LCI nine years ago) marching orders are firm: target the information, make it as useful to professional lawn providers as possible, and—he was insistent on this one—be concise.

Fewer words, more info

That's fine with me.

I'm convinced that you'll appreciate it too.

As busy as you are, you've told us, often face to face, that you don't need, nor do you want more reading material. You want more information, and information that's more timely, more focused and easier to retrieve and use.

We didn't have to climb to the top of any mountain to make this decision, but, collectively, we've all had to step back and take a few deep breaths (with some significant soul searching and expense) to recognize the growing interdependence of the various segments of the green industry services market.

We're all in this together.

I'm confident we'll all prosper together. LCI

Ron Hall

VA TURF SHOW SET SEPT. 17-19

BLACKSBURG, VA—The Virginia Tech Turf and Landscape Field Days is Sept 17-19 at the Virginia Tech Campus here.

Contact J.R. Hall III, 703/231-5797.

The 32nd Virginia Turf & Landscape Conference and Trade Show will be January 13-16, 1992, at the Richmond Centre and Richmond Marriott, Richmond, VA. Contact Randeen Tharp 804/340-3473. LCI

Caution: well on property

Contaminating a well with lawn care chemicals is possible but the risk is small if the applicator uses his head and follows the product labels

BY JAMES E. GUYETTE

Taking some simple precautions can keep LCOs out of trouble in treating properties with wells.

"As we see it the risk (groundwater contamination) from lawn care products, if they're used correctly, is relatively small," says Jack Kramer, lab manager at Heidelberg College Water Quality Laboratory, Tiffin, Ohio. Much of the risk of contamination "depends on the quality of well construction and the surrounding aquifer," he says.

Naturally, Kramer says, LCOs must read and follow label instructions.

"The best insurance against ground water contamination is to just follow the label recommendations," says John J. Bria, manager at Alpine Lawn care in Brewster, NY.

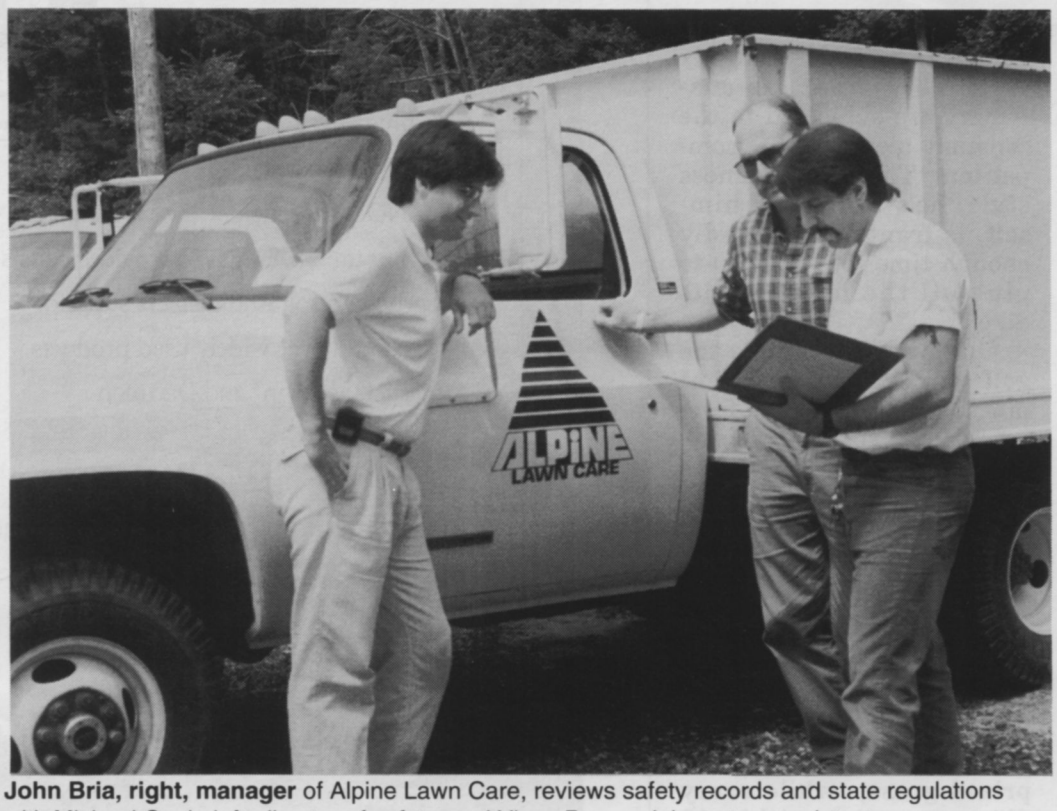
"And," he continues, "we don't over-fertilize." Bria adds that because his company uses slow-release nitrogen products "100 percent of what we apply is plant-available. Leaching is minimized. It doesn't get dissolved in the soil or washed away."

Two things protect groundwater from contamination, says Karen Mancl, water quality specialist at Ohio State University.

"Most people underestimate the cleansing properties of soil," she says. As water seeps through the ground into the aquifer, contaminants are filtered and diluted.

Also, Mancl says, well water doesn't move much. If one area does become polluted, the contamination doesn't spread as it would in a lake or stream.

More than two million Ohio residents rely on wells, cisterns or springs. Chemicals aren't groundwater's biggest foe.



John Bria, right, manager of Alpine Lawn Care, reviews safety records and state regulations with Michael Cook, left, director of safety, and Vince Boccumini, center, assistant manager.

Bacteria bigger threat

"By far, bacteria is the number one problem in Ohio's well water," says Mancl. Forty percent of the state's wells show levels of coliform bacteria which indicate a threat of water-borne disease.

In contrast, only 0.01 percent of well water has been found to contain pesticides in any significant amount, she says.

"Although bacterial contamination is more common, a few wells and springs contain traces of organic chemicals, such as pesticides," she reports. "Those that do have chemicals in them are usually the result of the owner's carelessness. For instance a farmer may take a pesticide in its container near a well to dilute it. The pesticide could

splash or back-siphon and get into the well, and that's enough to contaminate drinking water."

Far less common are wells contaminated by chemicals that have worked their way through the soil, says Mancl. But it's possible., especially in porous or sandy soils.

When chemicals move quickly through the soil, they don't have enough time to break down into safer substances before reaching groundwater.

Heidelberg College's Kramer says groundwater contamination issues can get tricky.

"These are very complicated questions," notes Kramer, "and it depends on what chemicals you are using."

Some chemicals, such as nitrate nitrogen, can "slide" through soils, while others get tied up right away. "If it moves through the soils it could wind up in the wells," says Kramer.

"Most people underestimate the cleansing property of soil"—Karen Mancl, water quality specialist at Ohio State University

A safe distance

"If the material is kept from getting near the well, it won't get in it. The ag people are saying, if you're making it or mixing it, be at least 50 feet away from your well. And applying it is the same thing.," says Kramer.

While it may not be practical to treat a lawn when you have to stop 50 feet from a well, LCOs can assess any obvious risk by checking out the workmanship and location of the well.

"It (contamination) hasn't been a problem when the well's been properly constructed," says Kramer.

Beware of sandy soils and shallow shafts. With a 15-foot well in sandy ground, "you can bet your bottom buck that whatever you put on there is likely to wind up in what you drink," says Kramer.

Is it a good well?

Check to see of the well meets modern standards. "If great grandpa put that well out there in 1906 it probably is not too good."

The well should have a casing made of steel or plastic pipe, and that casing should extend above the ground. Use caution if the casing appears overly rusted. Look to see that the ground slopes away from the well head and that no puddle is around the base.

Is the well capped? "It should not be open to the air. It should be covered," says Kramer.

Be especially concerned if you see an old, unused well or a "wishing well" on the property. It probably goes down to the same water table.

Bria at Alpine Lawn care has yet to come across an old well on any of the properties, but "if we encountered a situation like that we'd treat it as an open body of water."

If a well appears to be a risky proposition, check with your county extension agent or the local health department before treating, Kramer suggests.

Under normal conditions prospective customers should not be alarmed over having a well on their property, Bria notes, adding that in his New York yards the wells are sunk some 300 feet and the pump is at the bottom—far out of reach of any lawn treatments. "When people look at the location of the pump their fears are eliminated."

If a customer or neighbor happens to accuse you of contaminating a well, have a water analysis done by a disinterested third party. The water should be checked for coliform bacteria, nitrates, pH and total dissolved solids as well as pesticides.

With the dissolved solids, anything above 500 milligrams per liter indicates a problem and the need for more specific tests.

With nitrate nitrogen, children less than a year old should not drink water containing more than 10 milligrams per liter.

A bad well could become contaminated from many sources: leaking fuel tank, coal mining, gas and oil drilling, road salt, landfills, sludge use or septic systems.

Find out if the homeowner has been having the well tested each year. If not, it might be difficult to prove that you are the cause of any problem. The pollution could have happened before you got the account. LCI

Groundwater contamination precaution just one part of responsible pesticide programs

Davey Tree acted on entire pesticide issue—including storage, mixing, use

The Davey Tree Expert Co., Kent, Ohio, is doing all it can to reduce the possibility of groundwater contamination.

The company:

- developed tree and lawn care programs (and application products to support the programs) to drastically reduce pesticide use;
- trains and supports its field personnel;
- is improving and expanding its pesticide storage and mixing facilities;

"If we only apply products where the pests are, it reduces the likelihood of any type of groundwater contamination," says Kathy Zahirsky, company coordinator of environmental programs.

By implementing its company-wide program of pest mapping and monitoring, and then spot treating with its company-designed *Customizer* spray gun, Davey says it reduced pesticide use by 75% over several years.

Also, Davey crews receive extensive training in all aspects of lawn and tree care and how it relates to the environment. A homeowner—or a homeowner's neighbor—who has fears over chemicals getting into a well system is given consideration, she says.

"If there are any concerns by the client we would keep away from the well head," she points out.

With Davey's Plant Health Care Program, "we're looking at lawn care through an IPM approach," says Zahirsky.

"It seems to be working just fine. The customer particularly likes our approach because it's not a blanket approach—it's targeted at specific weeks. Less pesticides are used, yet it still controls the weed problem."

When the Customizer was introduced into test markets in 1987, herbicide use was cut 50 percent and insecticide use about 36 percent. In 1988 it was estimated that 16,000 gallons of lawn herbicides would be needed, yet actual use fell to 7,600 gallons. A projected use of 3,300 gallons of lawn insecticides dropped to 1,930 gallons.

"I think we've made Davey more attractive" to environmentally conscious home owners," says Zahirsky. "They're all for less use of pesticides as long as it can solve the problem."

Concern over groundwater contamination is not just practiced on the lawns. Care is taken on the road and at headquarters too.

"If there's any type of spill or discharge we contain it as much as possible on concrete. We try to keep it on concrete and out of drains whenever possible," says Zahirsky.

Some Davey branches have recycling systems for washing out tanks, and more are on the way. "We have several wash-recycle systems in states that have not yet mandated them," she notes. "The rinse water is recycled into a holding tank." Precautions are taken in chemical storage too, she says. LCI

Coalition aim to get pesticide regs out of hands of localites

WASHINGTON, D.C.—The battle cry is "uniformity" in pesticide legislation.

The crusader is a coalition—perhaps the largest ever formed—of chemical manufacturers, distributors, and end users.

The coalition's goal is to get the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) amended to specifically preempt towns and cities from passing their own pesticide rules.

The alliance is industry's response to a June U.S. Supreme Court ruling allowing local political subdivisions to draft their own pesticide-use regulations.

Specifically, the Supreme Court ruled that FIFRA did not forbid local political subdivisions from making pesticide laws.

Involved in the coalition are representatives from:

- Agricultural Commodity Coalition,
- American Association of Nurserymen,
- Chemical Manufacturers Association,
- Chemical Producers and Distributors Association,
- Chemical Specialities Manufacturers Association,
- National Agricultural Chemicals Association,
- National Pest Control Association,
- Professional Lawn Care Association of America,
- Responsible Industry for a Sound Environment.

"The June 21 court ruling paves the way for cities and towns to adopt regulations regarding pesticide sales and use which may very well conflict with state or federal rules already imposed on manufacturers, applicators and dealers," reports *Executive Newswatch,* a publication from the Chemical Specialties Manufacturers Association.

The CSMA—and other industry groups—maintains that FIFRA, the nation's primary pesticide law since 1972, permits state regulation of pesticide sale and use but does not address regulation by local jurisdictions. LCI

Shigo workshop

LOUISVILLE, KY—Dr. Alex Shigo will put on a one-day workshop about "new tree biology" here in November.

He is appearing during the 21st annual educational conference of The National Institute on Park and Grounds Management, Nov. 17-20.

Contact the Institute at P.O. Box 1936, Appleton, WI 54913. 414/733-2301. LCI

Desert show Dec.

LAS VEGAS, NV—Desert Turfgrass/Landscape Conference, Dec. 11-13, Caesars Palace.

Desert Turfgrass Conference and Show, P.O. Box 94857, Las Vegas, NV 89193. 702/739-8500. LCI

You shall know your customer and it will make you succeed!

Some thoughts on how to conduct your own market research (and not spend a fortune getting it done).

BY JOHN ROGERS

There are many low-cost ways to learn about potential customers.

You can turn to the suppliers of the products you use, your local chamber of commerce, or the local press, all of whom may have free-for-the-asking surveys of customers.

These will give you demographic details such as age, education, home ownership, etc. But you must learn more about prospects than just vital statistics. To intelligently plan your sales and advertising, you need information about buying habits and attitudes.

Do it yourself?

A professional research firm, at considerable expense, will do a study just for you. But less expensive and perhaps better would be to do your own study, whether by mail, phone or in person. That's because you should have a better feel for the kinds of clients you want, certainly about your industry., than any professional surveyor.

Incidentally, when it comes to costs, consider asking your suppliers for co-op funding. Why not? Results will help you sell their products better and they should be grateful if you share results.

Invoice stuffer

The simplest, easiest and fastest do-it-yourself survey of customers is a brief questionnaire with your invoice mailing, or put it in every piece of literature you hand the customer.

The purpose of the quickie questionnaire is to smoke out any customer dissatisfaction or, conversely,.to discover what your strong points are. Some sample questions for this brief survey are:

- How did we treat you
- Did we keep all our promises?

The purpose of the quickie questionnaire is to smoke out customer dissatisfaction or to discover your strong points.

- Did you get quality service?
- How helpful and polite were we?
- What other comments do you have?

How to do it in depth?

However, you need to know much more than "How are we doing?". Hopefully, you decide to do a detailed survey.

The first step is to decide what you want to know. You'll also have to decide how best to get this information—by mail, phone or in person.

A mail survey can use a longer, more detailed questionnaire. Surveying by phone or in person requires shorter questions with a conversational tone.

Mail surveys useful

The next step is to decide who to survey. Professional researchers call this the "sample" or the portion of the "universe" which is your entire service area.

Mail surveys lend themselves readily to do-it-yourself market research, but you'll need a mailing list. Your regular customer list is handy but, then, you won't learn anything about your prospects, just your customers.

Direct mail houses offer a broad variety of mail lists, some just for your service area.

You can select among respondent homeowners, upper income, etc. The direct mail firm will even do the mailing. for you. The cost would be about 42 cents per name, including labeling envelopes, inserting, sealing, and postage., more of course if postage rises again.

Cost estimates

Response to a mail questionnaire usually is about five percent. If you want a response of 200, that means a mailing of 4,000. Cost would be $1,680 for mailing 4,000. Added to that would be $240 for paper and envelopes.

For each postage-paid response you would pay 65 cents using your own mailing permit or that of the mail house, where the respondent mails free and the post office charges you per response. So it would be $130 for a response of 200. Total of mailing and response expenses would be $2,050 or $10 per response for the 200.

A phone survey

A phone survey would probably be less expensive and it too can be a do-it-yourself project. It can be simple and provide extra insights into your customers.

Finding a sample list for a phone survey is easy. Just turn to your residential phone directory and concentrate on the numbers in your service area, perhaps selecting every fifth name. Use the Yellow Pages if you're seeking industrial and commercial customers.

If you want a response of 200 in your phone survey, figure on calling about 600 homes. Researchers say that 600 calls will yield 500 contacts and 100 busy signals, answering machines or no answers.

Who's calling?

Who will do the calling for your survey?

You, of course, and the more articulate members of your staff.

Use a team appraoch and build team spirit and cooperation.

The three most common marketing mistakes:

1. Defining and limiting marketing to "getting new clients."
2. Becoming obsessed with growth for growth's sake.
3. Attempting to be "all good things" to all types of clients—James H. Mitchell, Practical Marketing Techniques for the Landscape Company

Work after business hours. Give a marked copy of the phone book to everyone calling.

Each caller should be assigned a number or a letter to write on questionnaires completed during the the calls. That way you know who to ask later about illegible questionnaires.

Also, by coding the responses, each caller can take more pride in the work. If your team needs more phones than you have at your store, then arrangements can be made through the phone company to use other ties. By calling together at the same time, callers become a team.

What are the best calling techniques? These vary with the caller. Each caller will soon find out what works best for them.

For openers, you might assure those answering that you are not selling anything and their names will not be used.

You just want answers to a few questions. Assure them that the process will take no longer than five minutes. To make sure that is true, test the questionaire's length by having team members interview each other first.

This will also help them develop their own best techniques before going into battle.

In calling, it's best to identify yourself right away, perhaps with: "This is Charlie from Charlies Green and Lean and I would like to ask you a few questions for a survey we are doing."

Be friendly, speak clearly

Each caller should be friendly, speaking slowly and clearly, and avoiding the robot monotone. When you encounter reluctance, disengage quickly rather than trying to sell the survey idea and overcome objections. Chances are that if you have to sell the prospect on an interview, it will not be a good one.

The time wasted could better go into making a few other calls. After the first half hour of calling have all completed questionnaires turned in to you. For the next half hour go through them with an eye to what changes in technique or questions may be needed.

At the end of the first hour of calling, bring the team together for a beverage break to discuss how it's going. At this point they may share experiences and suggest changes.

How to table the responses?

You might want to get some advice from your suppliers or a local advertising vendor—newspaper, radio or television. Or you can figure it out for yourself. Because of the miracle of calculators, it's easy to compute averages of responses to each question. You can tell precisely how much the customer spends, what are the biggest appeals, etc. Then you know how best to reach your customers and add new ones. From this you can target your advertising and how you might best reach your sales goals.

School marketing project

One often overlooked source of help with your surveying is the marketing school at a local university. This author helped direct a door-to-door survey conducted by the Bradley University in Peoria, IL, for a group of suppliers. The marketing class made the survey a semester-long project and did it all, from questionnaire design, to making the calls, and analyzing results.

The only cost to us was a reporting banquet for that class of 25.

Is do-it-yourself marketing worth the time and trouble?

Absolutely. From simple "How are we doing?" slips inserted in invoice mailings to detailed phone surveys, you will learn more about your customers which is every bit as important as knowing your service.

John Rogers is a business writer who lives in St. Louis, MO.

LCI

PR specialist offers down-to-earth ideas in new marketing book

BY RON HALL

Marketing is elusive for many small business owners, but an Oregon-based public relations specialist spreads it out like a moth on a specimen board in a new book.

James H. Mitchell for the past 10 years has helped green industry companies in the Pacific Northwest market their services. The lessons he's learned about getting THE service message to customers and potential customers is wrapped up in Practical Marketing Techniques For The Landscape Company.

Another bargain?

You're skeptical. I mean, why is it that everything—from slicer/dicers to tummy wraps— costs $19.95 plus $3 S/H? At least on late-night television it does. Well, you won't see this book advertised after Letterman signs off but that's how much it costs.

The reason why this book could be worth so much more to any business owner is that it's heavy on the practical and light on theory.

At about 80-pages plus, this book is an easy read. I whisked through it in just over two hours although it would take a couple of readings, some thought, and some purposeful action to make these suggestions pay off in more and better customers.

The book outlines a game plan with more than a few examples of the successes and shortcomings of other green industry business marketing efforts.

"Starting a marketing program is not producing a brochure, starting a newsletter or getting some publicity," writes Mitchell.

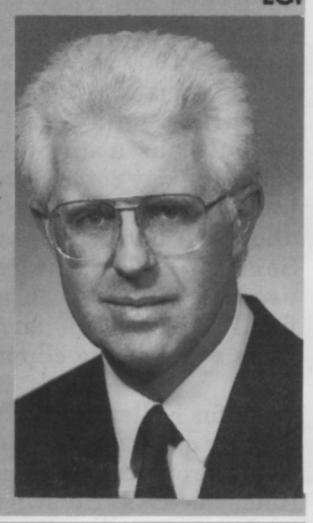
Indeed it's not. This is a solid place to start for any green industry professional that's a little bit fuzzy on the concept of marketing, and there are more than a few nuggets for small business marketing pros too.

The author, Mitchell, describes his effort as "A compilation of notes, experiences, charts, graphs, examples, case histories and just plain common sense, all geared to help the landscape company make the most efficient use of time and money to attract and retain good customers.."

Wonder be, here's a marketer that follows his own advice—tell the customer what they're getting, then deliver it.

The book is available through: Landscape Horticulture Center for Personnel Development, 2509 E. Thousand Oaks Blvd., Suite 109, Westlake Village, CA 91362. 805/499-5229. LCI

"A compilation of notes, experiences...and just plain common sense"—James H. Mitchell, Practical Marketing Techniques for the Landscape Company



Chicago-area job calls for 151 acres of grass, over 330,000 shrubs, cooperation of 5 firms

HOFFMAN ESTATES, IL—What kind of an irrigation system do you need for:

- nearly 5,000 trees,
- more than 330,000 deciduous shrubs,
- 151 acres of grass?

If you answered, "a big one," you're partially right. But the job, is obviously, more complicated than that.

Muellermist Lawn Sprinkling Systems, Broadview, IL, is using one master computerized controller and nine additional controllers, each with 20 zones, to deal out the water at appropriate intervals at the 237-acre Ameritech Center being built here.

This is one of the largest landscape and irrigation projects ever in Illinois. Five companies all working under an independent project manager and operating as Lakewood Partners are landscaping the site.

The five companies: Otto Damgaard Sons Inc., Des Plaines; Church Landscape Co. Inc., Lombard; Moore Landscape Inc., Glenview; Thornapple Nurseries Inc., Geneva; and Quercus Ltd., Chicago. The landscape architect is Joe Karr.

But back to the irrigation aspect of the project. How about 2,200 sprinkler heads, 155,000 linear feet of piping, and 300,000 feet of electrical wire?

"The system will actually conserve water," says Andy Wright, president of Muellermist. "With the size of this landscape investment, the irrigation and drainage system has to be top notch to protect the investment."

Muellermist, this past year, installed the watering and drainage system at the new Comiskey Park, and the sprinkler system for the addition to the Shedd Aquarium. LCI

It did not look like much last spring, but five landscape firms are at work on huge development near Chicago. Turf and trees are crucial to the plan.

FIXES

from page 1

High grass growth can lead to grass-clumped lawns, multiple mowings or rake duty—situations that Keller doesn't find acceptable.

Still picking up

Nichols Lawn Service Inc., Wichita, KS, markets mulching mowers along with its other landscape offerings, and even president Larry Nichols concedes that wet or high grass can be a tough row for a mulching mower to hoe: "They don't leave your lawn looking the best."

Both Keller and Nichols pick up the clippings.

LCOs should think and go over their numbers before launching a composting program—Don Keller, owner, Keller's Tree and Shrub Care, Independence, MO

"Every one that we do wants them picked up, except maybe 10 out of a 100," says Nichols. "We're taking them to a landfill right now."

Unlike many LCOs though, Nichols has a number of options when the day comes that grass is no longer accepted there. "We own about 80 acres of land," he says. Some of his clippings have been used on oil spills on a nearby oil field. And, a local farmer incorporates some of the clippings into his soil.

As for Keller, he has a small composting operation on the three acres of his property. "It takes very little time," he says. He owns a front-end loader to turn the piles, and rents a chipper once a year to grind up his pruning wastes.

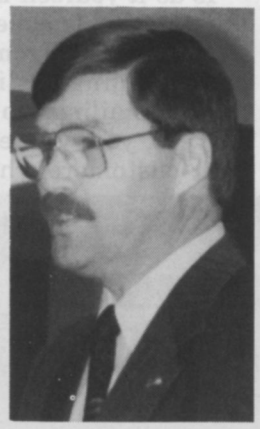
Maybe lawn care pros are looking at the landscape waste issue from the wrong angle anyway, he feels. It may turn out to be an opportunity for LCOs.

"Where there's a need somebody's going to find a way to make money from it," says Keller. It may come in the form of composting.

Most customers still want their lawn clippings picked up and disposed of—Larry Nichols, president Nichols Lawn Service, Wichita, KS

"Most of these privately run landfills are finishing up on their permits. Most of them are going to be composting," he feels.

The process is already underway in some areas of the country. In New York State, for example, there are about 150 government-operated yard waste composting facilities (one in an abandoned NIKE missile site) and about a dozen major private operations, says David Kay, a research specialist with the Department of Agriculture Economics at Cornell University.



Key suggests that turf managers promote backyard composting with their clients.

"Maybe what they (LCOs) should try to do is talk the customers into letting them set up a small composting bin at their house. It would take some salesmanship though because I don't think most people would go for it."

Even setting up a larger-scale compost facility, perhaps even a cooperative among several companies, can run into unexpected roadblocks.

Uh oh, regs again

Any facility handling more than 3,000 cubic yards of raw landscape waste in New York needs a permit. Other states have similar laws.

Remember, also—and this could be crucial—you may have neighbors to contend with.

"If you have a small site and something goes wrong, it may be a little smelly but not overwhelming," says Kay. If you have a big site and something goes wrong, more people notice."

Kay says grass clippings can generate an odor rather quickly. "You have to turn the piles frequently during the summer and it has to be mixed with other materials."

Kay says that a composting cooperative will probably need at least a front loader to turn the material. That would be a major upfront expense.

Equipment costs large

Keller agrees the equipment needed for a large-scale composting operation could be expensive, particularly for a single company.

He compares the cost of composting to snow plowing with both needing rather heavy equipment requiring regular maintenance.

"People will have to sit down and carefully look at what it'll cost them," he cautions. LCI

Will clients want composting? Some LCOs think time is right

By James E. Guyette

Backyard composting is an option for LCOs with customers who insist on clipping-free lawns.

In addition to soothing those clients who disdain the otherwise highly successful "Don't Bag It" and "Grasscycling" campaigns, composting can also be useful on wooded properties that generate lots of leaves, brush and other yard wastes.

Already at least 16 states have passed legislation banning yard waste from landfills as more communities across the nation refuse to pick up yard wastes left at the curb.

Americans generate 160 millions tons of trash a year. Only about 11 percent is recycled or composted, while 75 percent is entombed in landfills and 13 percent is incinerated, says U.S. Representative George J. Hochbrueckner (D-NY) who introduced into Congress the Composting Research Act of 1990.

Since 1978, 70 percent of the nation's landfills—14,000 facilities—have been shut down.

Yard waste, big deal

Yard wastes—wastes that could be composted--take up as much as 20 percent by weight of the available landfill space, second only to paper and cardboard.

I've believe that composting could prove to be the sleeping giant of waste management"—U.S. Rep. George J. Hochbruckner (D-NY)

"I believe that composting could prove to be the sleeping giant of waste management," relates Hochbrueckner.

Some towns have centralized composting centers—as do some landscape firms. But for LCOs in areas lacking these alternatives, having your clients embrace a backyard composting program can bring some relief to a thorny and costly disposal problem.

Backyard operations

"To run a backyard composting program is cheaper than hauling it away and burying it," says Dr. Tony Dominski, education director at the Community Environmental Council in Santa Barbara County, CA. The organization is running a pilot backyard composting program for the local government.

"If a homeowner has a bin, they can have the lawn care operator toss the waste into it rather than haul it away," says Candy Cox, vice president of C2S2 Group Inc. in Seattle. The organization trains those who are interested in setting up municipal backyard composting programs.

"An LCO can buy a bin for their customers and then use that mulch as they're doing the yard service," claims Cox. "In a very short time they will have paid for that bin in reduced disposal charges."

Cleveland, Ohio-area LCO Phil Fogarty is distributing a 55-gallon polyurethane-weave composting bag designed specifically for lawn clippings. Says Fogarty, "you'd pay for the bag in less than a year and then you'd have the compost. The product appears very marketable and the timing is right."

Advertises services

Fogarty was also attracted to the bag because LCOs can use them for advertising, with their company logos on the sides of the bag. And the compost bags blend nicely with landscapes.

There are a number of compost bins on the market.

If an LCO is reluctant to leap into the compost bin distribution business, Fogarty suggests that perhaps a partnership can be formed with the local government.

"It would be natural for cities to sell these to their citizens," he says.

John Bajor, public works services manager in St. Charles, IL, agrees it looks like a solid idea. His community has a municipal backyard composting program already in place. Homeowners, he feels, are ready for composting, "anything to save the environment."

Composting goes beyond national borders. The movement is gaining steam in Canada, says Michael L. Levenston, executive director of City Farmer, which runs a backyard composting program in Vancouver, BC.

He says that more than 100 communities have backyard composting programs in Ontario province.

People excited about compost

"People are excited about it right now," says Levenston. "Everybody wants to do the right thing."

Backyard composting is also growing on the West Coast.

Santa Barbara County bought 500 composting bins to give to residents, and others bought their own. "It's definitely gathering momentum," says county official Dominski.

Any LCO setting up a program should probably look into having company crews monitor the composting bags or bins to make sure they're being used correctly.

Too many clippings and not enough other organic materials and the system doesn't work as efficiently as it should.

Dr. William Pound, extension turfgrass specialist at The Ohio State University, says a 7,500 square foot lawn generates 3,000 pounds of grass clippings a year.

"Grass by itself isn't very good because it tends to compact," says Andy Fogarty (no relation to LCO Phil Fogarty).

"Some municipalities have a problem with brown liquid oozing out the bottom," says Andy Fogarty, a microbiology graduate research assistant at OSU.

Adds Carl Woestendiek, project manager for backyard composting at the City of Seattle, "we encourage people to mix them (clippings) with other materials."

Leaves and brush are natural additives, but straw can be used as well for areas of high clippings and low on other landscape debris.

"Buy a bale of straw for three bucks. You need the carbon source and you need the air space," says Levenston in Vancouver.

LCOs and/or customers may have concerns over the fate of pesticide-treated clippings in a compost bin.

A six-month composting program will solve this problem, says Dr. Harry Hoitink, a plant pathologist at Ohio State University's Agricultural Research and Development Center, Wooster.

After six months any material that was applied to the grass prior to mowing has been degraded to levels below concern, he says.

Larger better?

Hointink favors large, centralized composting sites over backyard-based projects. A compost bin must be well managed to be effective, he emphasizes.

Others too stress that LCOs must remain on top of a backyard program for it to work.

"Are these bins going to be used for toys in the backyard?" wonders Levenston. "Is the health department going to get fed up with rats everywhere. You can't just have everyone throwing their trash out into their yards."

Some basic decisions must be made before installing any type of compost system. How about food scraps as compost?

No food please

Not a good idea, says Cox at C2S2 in Seattle. "Programs in other parts of the country encourage people to put kitchen waste in their compost bins. So, I guess, it depends on where you live."

Whatever the case, LCOs thinking about helping homeowners with composting would probably be wise to consult with more experienced composters before making detailed plans.

A local "environmental" group should be able to provide a referral.

Also, make sure that any type of bin or bag that you distribute or sell is top quality.

Cutting corners on a composting plan spells lots of trouble. LCI

California owner: composting cuts wastes 50%

A California LCO thinks backyard composting is a good thing for his clients—and his business.

"Normally it doesn't take a great amount of effort to compost," says Marshall Chrostowski, owner of M.C. Landscape Gardening, Santa Barbara.

He says composting cut his customer yard waste in half. One recent month saw the debris shrink from 21 to just 11 tons. "I used to go two times a week to the dump. Now I go twice a month. The tipping fees got to be excessive, or else it's prohibited," he says, referring to a $50 a ton disposal charge.

Even so, many of his customers still insist he remove yard waste from their properties.

"It's traditional to use a catcher, and it's hard to educate people," says Chrostowski.

Chrostowski and his crew personally attend to backyard composting. Homeowners don't want to do it.

"I will sometimes get them involved without them knowing about it," he says, by preparing a compost pile and then gauging customer satisfaction when the finished product is ready.

In other situations, he uses grass clippings under trees, like a mulch.

Because M.C. Landscape Gardening is a full-service company, there's usually a large supply of leftover brush to create excellent compost. Although his company doesn't do tree work, it does have three shredders.

"As much as possible I try to chip branches," he says. The compost pile should contain no more than 60 percent grass, and that grass should be balanced by including 40 percent carbon-rich waste such as woody materials. "I tend to think of it in terms of green and brown—two parts brown to one part green."

Most of the composting bins now being marketed at the retail level are too small to be effective, says Chrostowski who recommends multiple bins—one for storage, one for the composting process, and the third to hold finished product. LCI

Joseph Bilskemper, l. to r., Michael Rude and Tim Jones

Lawn Care Specialists had to pass an environmental audit before bank would loan money for new building.

Wisconsin LCO's headquarters strong on pesticide storage, mixing and safety features

LACROSSE, WI—If you're going to do the job, do it right.

That's been part of LCO Joe Bilskemper's business philosophy so when he designed and built new office and shop space for his Wisconsin lawn care company he did it right.

That included installing almost 5,400 square feet of state-of-the-art pesticide storage, mixing and loading facilities inside the 7,000 square feet building.

"We were running out of space and we needed a home," said Bilskemper, Lawn Care Specialists, Inc., Lacrosse, WI.

Bilskemper started in the professional lawn business in 1979 as a mower. "But everybody wanted their lawn sprayed," he recalled. It wasn't long before the company's emphasis switched to lawn applications although LC Specialists still has two commercial cutting crews.

It also has two aeration crews to support its four applicators (Joe is on lawns almost daily too.) Aeration is an integral part of LC Specialists' five-step lawn program. "We just won't sell one or two applications," said Bilskemper. "If we did, how could we monitor the progress of our customers' lawns during the course of the year?"

Joe had been contemplating building a home for his company, but when the Wisconsin Department of Agriculture issued new regulations for pesticide mixing and loading ("They apparently did a lot of research and found out that's when most spills occur," said Bilskemper), that clinched the decision for him.

Anyone using 1500 pounds or more of pesticide must abide by the laws.

The shop area of LC Specialists now has a concrete pad mixing and loading area with a pitched floor. The company's trucks are also washed here. Pumps recycle the rinse water from this area to a holding tank so the rinsate can be saved and reused on clients' lawns.

"There were some extra costs in building these facilities and we had to pass an environmental audit before we could get bank financing," said Bilskemper, "but we're glad we did it."

LCI

Michael Rude uses recycled vehicle wash water in next day's route

Secondhand H_2O is plentiful; turf irrigation use could grow rapidly

A California turfgrass specialist says more reclaimed water will be used to irrigate turfgrass, particularly in arid and semi-arid regions of the United States—also in and around big cities.

Dr. Ali Harivandi with the University of California Cooperative Extension says the use of reclaimed water for irrigation, particularly for non-food crops like turf, will rise because of continuing water shortages, the rising cost of fresh water and better technology to reclaim waste water.

"Although there is not much competition for use of effluent at this time, such competition is likely in the near future," says Harivandi.

(Even so, he feels, it's unlikely the public will accept the return of reclaimed water to municipal water systems for drinking, cooking and bathing.)

Turfgrass areas such as parks, cemeteries and golf courses will be in a good position to compete for this reclaimed water, says Harivandi, because:

- turfgrasses absorb relatively large amounts of nitrogen and other nutrients often found in higher quantities in reclaimed water than in fresh water,
- reclaimed water is produced continuously; any use of it, therefore, also needs to be continuous,
- most expanses of irrigated turf are located adjacent to cities where effluent water is produced,
- potential health problems arising from the use of reclaimed water would appear to be less when water is applied to turf than when it is applied to food crops,
- soil-related problems that might develop due to the use of reclaimed water will have less social and economic impact if they develop where turf is cultivated than if they develop where food crops are grown.

Most water runs off

Harivandi says he discovered that only 1.3 percent of the effluent water in populous Alameda County, CA, is being reused. In California, more than two-thirds of all treated water goes directly into the ocean or estuaries.

But using treated effluent isn't as simple as it might first appear.

Reclaimed water may be primary, secondary or advanced treated municipal or industrial wastewater. It's quality can vary considerably, writes Harivandi.

"Properly operated secondary and advanced treatment plants can reduce pathogen concentrations significantly," he says.

"However, it is difficult to insure complete, continuous elimination of pathogens, and the potential for disease transmission through treated effluent water reuse remains a concern."

Users of reclaimed water must consider the possibility of disease transmission by windblown spray, particularly in and around populated areas. The degree of hazard depends on the degree of wastewater treatment, extent of water-droplet travel, proximity to populated areas, climatic conditions and design of the irrigation system.

Harivandi says there is a significant seasonal variation in reclaimed water quality. Also, most contracts for wastewater require that a specific amount be accepted each day, while turf needs are variable. Therefore, storage capability is a common feature of systems using effluent water.

For the most part, coarse-textured soils such as sandy loams are best for the use of reclaimed water.

The soil's water holding capacity is also important in determining its suitability for reclaimed water irrigation.

Writes Harivandi: "Frequent application of reclaimed water on soils with high water holding capacity, such as clay soils, will contribute significantly to their accumulation of salts and heavy metals."

What's in water?

Apart from these considerations, the makeup of the treated effluent comes into play. Turf managers thinking about using treated effluents must investigate:

- **Salinity**. Most effluent waters are high in salts.
- **Permeability**. Permeability problems may occur if effluent water contains high levels of sodium.
- **Toxic elements**. Effluent waters usually contain a wide variety of elements in small concentrations. Problems can occur when certain elements accumulate in the soil to levels toxic to turfgrass and other plants—boron, chloride, copper, nickel, zinc, or cadmium.

But there are compelling reasons why reclaimed water will be increasingly used on turfgrass, including water conservation, water cost, and nutrient content.

"Nitrogen, phosphorus, and potassium, all of which are beneficial in turfgrass management programs, are primary nutrients present in most reclaimed waters," says Harivandi.

"Using reclaimed water to irrigate landscape plants, particularly turfgrass, is an increasingly attractive alternative to the often high priced, limited supply of fresh water available for landscape irrigation."

For a more complete discussion of the use of reclaimed water for turfgrass irrigation, obtain the 12-page leaflet "Effluent Water for Turfgrass Irrigation," recently published by University of California Cooperative Extension.

A comprehensive subject reference list is included. Order by title and publication number (Leaflet 21500) at $2 per copy. (check or money order payable to "UC Regents"). Write: ANR Publications, 6701 San Pablo Ave., Oakland, CA 94608. 415/642-2431. LCI

Turf 'cycling tests grow

KUTZTOWN, PA—The grass recycling program begun three years ago by Garden Way, Inc., the Rodale Institute and *Organic Gardening* magazine grows.

Dr. Terry M. Schettini of the Rodale Research Center says test plots will be enlarged from 150 to 1,200 square feet. Also a third plot, to measure grass clippings left by a side discharge mower, is in place.

Originally the demonstration project involved only two plots—one cut with a walk-behind mulching mower, the other with a walk-behind mower with a collection bag.

The program's purpose is to document the effects of leaving grass clippings on lawns rather than bagging them.

Researchers at the center here felt the plot with clippings showed a greener appearance than the bagged plot this past spring, and they're anxious to document this in the spring of 1991.

Also, they want to study the effect of grass mulching on lawns during periods of summer burnout. LCI

CT LCOs meet to establish an association

MERIDEN, CT—Surprising interest surfaced—representatives from 39 companies—at a meeting here Aug. 1 to discuss a state lawn care association for Connecticut.

"The group's primary function would be to promote lawn care professionalism within Connecticut," said an attendee. "A need is evident with the influx of unlicensed pesticide applicators and inexperienced homeowner usage."

Meetings will be the first Thursday of every month. For more information contact Dick or Carolyn at T&L Lawn Services 758-5955. LCI

Treemen meet

WHEAT RIDGE, CO—Arborists wanting to develop a consulting practice are invited to Sheraton Old Town in Albuquerque, NM, Oct. 17-19.

The American Society of Consulting Arborists (ASCA) meets then for its 1991 conference.

The conference is for experienced arborists who want information on developing the consulting part of their business.

For more information contact ASCA, 3895 Upham St., #12, Wheat Ridge, CO 80033. 303/420-9554. LCI

Media training valuable

STATE COLLEGE, PA—Lawn care professionals can deliver positive messages concerning the value of their services if they know what it is they want to say and how to say it.

That was the heart of a morning-long seminar at Penn State University here in early August.

Nancy Camp, a public relations specialist with McCullough & Associates, St. Louis, moderated the seminar. She hit the road this summer to coach LCOs on communication skills.on behalf of the Professional Lawn Care Association of America.

(If you missed her seminar, she will be conducting media training at the PLCAA Conference in Tampa, FL, on Sunday, Nov. 17).

Camp hammered on the importance of preparation. at the regional meetings.

"You absolutely have to have an agenda for yourself. You have to know before you speak to anybody in the media, what it is that's important to you, what it is you want to talk about, what it is you want to say," said Camp.

One reason why this is vital is because of the nature of today's media.

Said Camp: "The media has changed dramatically in the last five years. Competition is driving this change. Newspapers have begun to imitate the fast-food sound bite of the television and radio. U.S.A. Today is a classic example of that."

Beyond knowing (and perhaps even rehearsing) the points an LCO wants to get across in a media encounter, Camp said the subject of the interview must concentrate on positive aspects of service.

"You have to shape what you're saying in a way that showcases the benefits to the person or persons you're talking to," said Camp.

Contrary to what many lawn professionals might think, LCOs already have, or can build, significant credibility within their communities.

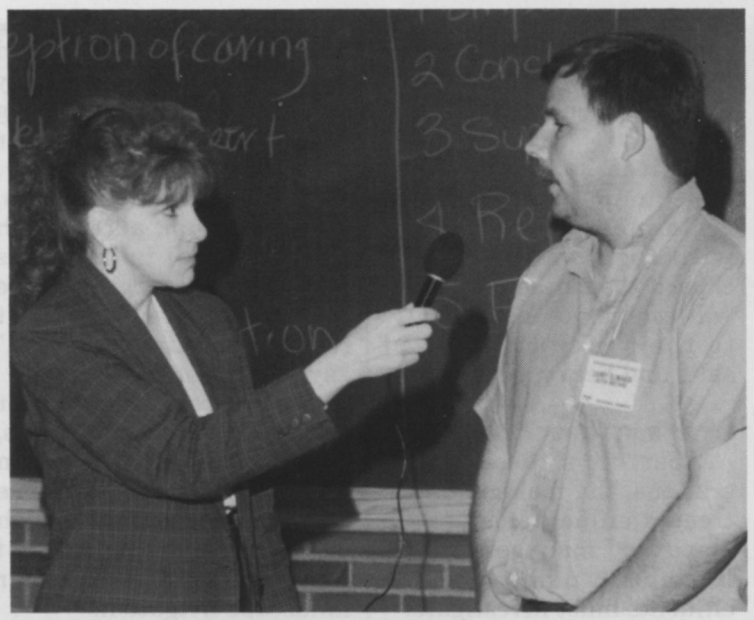
"The most credible source about lawn care to your customers is you," she said. "You have to be very positive about this because you have a lot more power and influence with them than you normally give yourself credit for."

In coaching the 30 or so LCOs at the Pennsylvania seminar, Camp was particularly careful to stress the importance of the concept of community with the lawn pros.

She warned the business people not to define the word "community" too narrowly. She said, a business person's community extends beyond strictly business and includes everything from social acquaintances to contacts in the local grocery.

It's within this context that LCOs should begin to think of themselves as "activists," that is actively promoting the positive aspects of their companies within their communities.

"You are your customers' perception of what the lawn care industry is all about," said Camp. LCI



Nancy Camp, McCullough & Associates, St. Louis, "interviews" Larry Ellmaker, Deiter Brothers Lawn Care, Bethlehem, PA, during a "How to Deal with the Media" training session in early August.

Dr. Tom Watschke, noted turfgrass expert at Penn State University, told attendees of a mid-summer turfgrass short course that the U.S. Environmental Protection Agency is requiring more detailed examinations of the fate of pesticides and fertilizers applied to turf, particularly in regards to runoff and groundwater. The course was co-sponsored by PLCAA and the Lawn Care Association of Pennsylvania.

Media interview? Think before you jump in

- Avoid jargon as much as possible.
- Use short familiar words in short, concise sentences.
- Know when to stop talking. Answer the question and make your point. That's all you need.
- Don't give an answer if you're not sure it's the right one.
- Think before you answer.
- Don't let the interviewer bully you. It's your interview as much as it is his or hers—and you probably know a lot more about the subject.
- Don't get angry. Count to 10.
- Before you're interviewed, think about what the questions are likely to be. Then think out reasoned and accurate answers.
- Listen to the question—the whole question. Remain quiet while the question is being asked, even if it implies wrong information. When given the opportunity, correct the question and bridge the positives.
- If you need time to think about the answer, ask the interviewer to rephrase the question.
- Never speak "off the record". There is no such thing.
- Tell the truth. Always. If the answer is negative, be honest, bridge quickly to a positive. LCI

Tighter regs for RU products

ARLINGTON, VA—Certified pesticide applicators can expect tighter regulations concerning restricted-use pesticides, reports the Golf Course Superintendents Association of America.

The regulations could be in place by next summer.

Arty Williams, chief of the Environmental Protection Agency's (EPA) field operations division, said the new rules—actually they're based on a 1985 task report on the certification and training of RUP applicators—will require:

- certified applicators to keep records of site-specific training;
- also to show competency of non-certified applicators who are applying RUPs.
- Recertification will be required at least every five years for all certified applicators.

Some states already have regulations similar to these.

Williams made his comments at a summer environmental forum hosted by the GCSAA.

At the same forum, Dennis Howard of EPA's Environmental Effects and Fate Division said regulations concerning pesticide storage and mixing/loading are still being drafted.

They probably will not be ready until 1993 and 1994, he said. As they stand now they would apply only to facilities that store 11,000 pounds or more of pesticide product, reports the GCSAA. LCI

UPCOMING PA TURF EVENTS

LEMONT, PA—The Pennsylvania Turfgrass Council events:

- Nov. 11-13, Penn State Golf Turf Conference, Keller Conference Center, University Park, PA . Contact: Dr. Joseph Duich, Dept. of Agronomy, 116 ASI Building, University Park, PA 16802, or PA Turfgrass Council, P.O. Box 1078, Lemont, PA 16851.
- Jan. 7-10, 1992. Eastern PA Turf Conference, Valley Forge Convention Center, King of Prussia, PA. Contact: Edward Roynan, Limekiln Golf Club, 1176 Limekiln Pike, Ambler, PA 19002 or PA Turfgrass Council.
- Feb. 4-5, 1992. Capital Region Turf & Ornamental School. Eastern Section, Holiday Inn, Grantville, PA. Western section, Embers Convention Center, Quality Inn, Carlisle, PA. Contact: James Welshans or Alan Michael, Dauphin Co. Coop. Ext., 1451 Peters Mountain Road, Dauphin, PA 17018. (the two-day meeting will run concurrently.)
- February 25-27, 1992. Western PA Turf Conference, Pittsburgh Expo Mart, Radisson Hotel, Monroeville, PA. Contact: John Yakubisin, 2911 McClintock Road, White Oak, PA 15131, or PA Turfgrass Council. LCI

Don, l. to r., Gayle, Doyle and Dwanye Jacklin of Jacklin Seed Company, at the company's turfseed research farm near Post Falls, ID. Jacklin's new J-138 Kentucky bluegrass looks like a winner.

SEED

from page1

which growers love to display in their advertising—but also many pages of information on how those ratings were developed.

It is this information that you can use to help determine whether the variety you're thinking of using is, in fact, the best variety for your needs.

What are these reports?

The U.S. Department of Agriculture, through its Agriculture Research Service in Beltsville, MD in cooperation with the University of Maryland, sponsors the National Turfgrass Evaluation Program.

This program collects and distributes information on submitted varieties developed at a number of uniform turfgrass evaluation trials at various locations in the United States and Canada.

Periodically, the compiled information is released to the public in the form of Progress Reports.

Using the information

Once you have decided which species of turfgrass that you're interested in (bluegrass, ryegrass, tall fescue, etc.), contact the National Turfgrass Evaluation Program at the Beltsville Agricultural Research Center West, Building 001, Room 328, Beltsville, MD 20705 to get the current appropriate report.

Although the content of each report will vary somewhat from species to species, the basic format of each report is the same. Each has a list of contributing locations, entries and sponsors, soil description, management practices and type of data collected.

Examine the contributing locations list. Identify those locations that are either closest to your location and/or whose weather and environment most closely approximate yours. This will provide the basis for further examination.

Next, check the soil (site) description list that is the most like yours. Soil conditions can vary dramatically within a relatively small area, especially if your primary clients are residential and most of the top soil has been trucked in from off-site locations.

If you don't know what the soil conditions are in your area (soil pH, soil phosphorus, soil potassium, etc.) then pass up this list.

Next, check the management practices list. Use this information to further reduce the group of reporting locations to those that closely resemble the average management practices for your area.

LCOs, dealing primarily with tall-cut turf should avoid test results based on very low or very high fertility, low mowing heights and no irrigation as these will be the exception rather than the norm.

This process will usually leave you with a data base of only two or three test locations, but that test data will more accurately approximate the turfgrass growing environment in your area.

Since the resulting data is more accurate than the national test data taken as a whole, frequently, for example, the top 10 highest rated varieties of your smaller data base will not be the same as the national rankings.

An example

You work in the Philadelphia area, you are looking for a high quality bluegrass variety for your upscale clientele and you do not know the detailed nature of the soil in your customers' area.

Jerry Pepin, Pickseed West, says MIC-1-8 is extremely low-growing tall fescue variety.

Using the 1986 bluegrass report, 10 out of 27 reporting locations are either in your general vicinity or have similar environments. Of those 10 locations, six approximate the level of fertility for your clients, moderate to high.

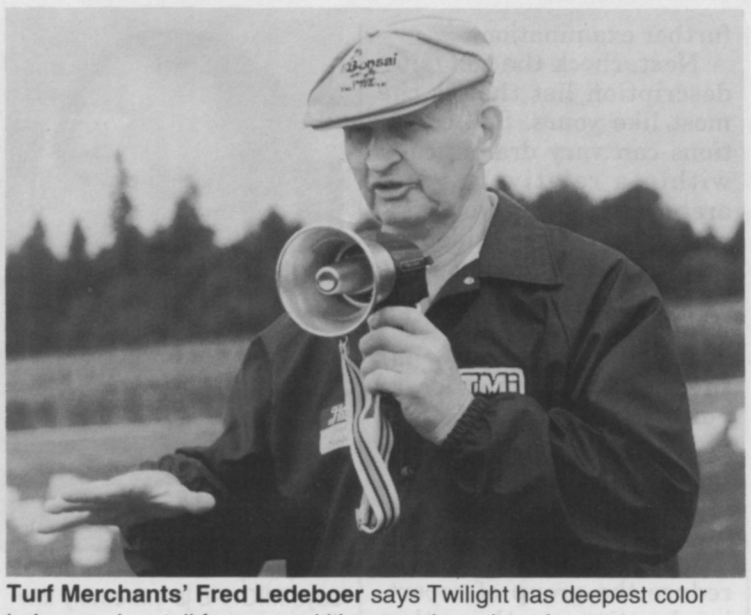
Of those six, only four meet the irrigation standards for your clientele to "prevent severe stress". Of these four, two either meet the irrigation standard of "to prevent stress" or are mowed at a high level. These two locations are Rhode Island and Kentucky.

With some compilation of the data from both trials, you come up with the following top 10 list for your needs: 1. Blacksburg, 2. America, 3. Haga, 4. Wabash, 5. Classic, 6. Challenger, 7. Rugby, 8. Liberty, 9. I-34, and 10. Georgetown.

Compare your list with the national list: 1. Midnight, 2. Blacksburg, 3. Rugby, 4. Asset, 5. Tendos, 6. Classic, 7. Trenton, 8. America, 9. Challenger, 10.

Les Adams, marketing manager of Seed Research, and Mike Robinson, right: customers want grass with endophytes.

Turf Seed Inc.'s Dr. Bill Meyer says perenniel ryegrasses being improved 5-10% each year.



Turf Merchants' Fred Ledeboer says Twilight has deepest color he's seen in a tall fescue and it's a good seed producer too.

Georgetown.

Now that you have your top 10 list, you can refine it further. Suppose that you want to select the varieties within your list that have the best genetic color, shown good resistance to summer stress and has best Dollar Spot resistance of the group.

For genetic color the top five rankings of your list are: 1. Blacksburg, 2. Challenger, 3. America, 4. Liberty, 5. Rugby.

For summer stress resistance (percent living cover): 1. America, 2. Classic, 3. Georgetown, 4. Liberty, 5. Challenger.

Lofts Seed Inc.'s Dr. Rich Hurley. The NJ-based firm with new perennial ryegrasses with endophyes—Repell II and Yorktown II.

For Dollar Spot resistance: 1. Blacksburg, 2. America, 3. Challenger, 4. Georgetown, 5. Wabash.

When you combine the data from these top five varieties in color, stress resistance, and Dollar Spot resistance with the top five of your original list you get the following overall top three list: 1. Blacksburg, 2. America, 3. Challenger.

I used the 1986 results because I followed this same procedure myself several years ago. It's likely I will update my selections with more recent reports.

Several observations: the difference in quality among the top-rated varieties is often slight, and you're wise to select the variety best suited to *your* area

Also, there is a difference in cost between recent, improved varieties and common varieties. Buy the improved, and buy it from a reputable, respected supplier. Your customers will appreciate it. **LCI**

PLAN

from page1

U.S. Environmental Protection Agency, community leaders, extension service personnel, and landfill managers.

The book includes:

- a seven-step program,
- suggestions for promotional events,
- a program timetable,
- sample letters,
- press releases,
- broadcast public service announcements,
- survey and guidelines.
- brochures, bumper stickers, decals, and presentation folders.

Cities currently promoting Grasscycling include Atlanta; Los Angeles, Long Beach, and Pasadena, CA; Germantown, TN; Salt Lake City Utah; and Allentown, PA.

The Grasscycling Community Action Plan is made possible by financial support of John Deere and The Andersons

The plan is available free from PLCAA members or by sending $5 to cover p/h to PLCAA, 1000 Johnson Ferry Road, NE, Suite C-135, Marietta, GA 30068. **LCI**

Who will keep your firm healthy when you're hurting?

Even operators of the smallest family business should have someone ready to take over in the event of illness or injury.

BY ERNEST W. FAIR

"Looks like Joe's business may go under unless he gets out of the hospital. His wife tried to take it over when he became sick but she's having a dickens of a time with it."

This particular Joe could be any lawn care business owner who has not developed an assistant.

A good business can run itself for a while, but what happens when an owner/operator is away for weeks or months due to illness or accident?

Where there is a well-trained assistant the business usually pulls through safely. When there isn't, some business owners have returned to the office to discover they literally have to start all over again.

It's too big a chance to take.

It's never too early to find the right person to train so that they'll be able to keep the business on track in the prolonged absence of the owner/operator. Whether that person comes from within the organization or not, the business owner obviously must find somebody with business ability.

That would mean someone with adequate education, a solid understanding of business principles, and, foremost, someone who can make a decision.

Previous experience in lawn care may not be a must, but it's an asset. So too is some business management experience, and the ability to communicate and interact with employees and clients. One negative experience with an important customer could lose the revenue from many future referrals.

Is the prospect antagonistic or aggressive? Confident or cocky? Fawning or friendly?

The person's ambitions and desires are also important. Someone without ambition seldom is a good prospect.

Don't rush through interviews with candidates. The person you select could become so vital to the continued well being of your company (and your family) that you must find out as much as you can.

Conduct interviews in private; no interruptions. I know it's easier said than done, but make an effort to be at ease and also to put the prospect at ease.

Let candidates talk. Experienced interviewers say they're amazed at what people will reveal about themselves—both flattering and not so flattering.

Once the business owner has picked a possible successor, training begins. The possible successor should be shown every step in the management of the business. Withholding even a small detail may result in that being the detail that causes problems if the owner leaves. Meanwhile this person should become known (and should know) all important customers, suppliers, bankers, etc. with whom you do business.

Training should gradually place responsibilities in the successor's hands. There is no end to training.

How much authority does the owner give an assistant?

Some make it complete; others place limits on what a successor can do.

Something not mentioned previously is having a spouse, son or daughter trained as a successor, at least as the person to handle finances and major decisions.

"I've always felt that I could not turn the business over completely to an assistant," one businessman confided. "I felt financial and personal problems were best kept within the family. I trained my wife to handle these while my assistant can handle the detailed operation of the business."

This decision is personal, but it has to be made. Too many business people don't even think about the possibility of becoming incapacitated so they never plan for it.

Those who have been in this situation, however, say it does pay to have someone they can trust.

Ernest W. Fair is a freelance writer living in Clackamas, OR. LCI

SUPPLIER SPOTLIGHT

Monsanto says new product extends LCOs' crabgrass application window

Does the registration of Monsanto's Dimension® turf herbicide promise a new type of weapon for weed control—a product with both pre and post emergence activity?

(A product with similar attributes from BASF is in the registration process.)

The active ingredient in Dimension, dithiopyr, says Monsanto, is characterized by outstanding activity on crabgrass and other significant weed pests, low use rates and excellent turf safety.

Dithiopyr appears to enter plants through the crowns, roots and shoots. The major site of physiological activity—inhibition of cell development and growth—is within developing plant tissues found in roots and shoots of susceptible plants.

Extends window

Potentially the most attractive feature of Dimension to lawn care and landscape professionals (apart from its effectiveness) is the application flexibility for crabgrass control.

When applying other preemergence herbicides for crabgrass control, LCOs in cool-season zones typically have a six or seven-week window of application. Monsanto claims that with Dimension applicators can stretch this window to 13 weeks. More time is then available to the LCO to better service current customers and seek additional accounts.

Typically, Dimension will be applied in the preemergence window—March to May in the north and January to March in western and southern states. (Fall application of Dimension for control of winter and summer annual grasses and broadleaf weeds is being studied by Monsanto.)

Monsanto says Dimension is a relatively insoluble compound that doesn't readily leach and stays active in the top layers of soil.

Residual control

"From our data, we expect Dimension at the two-quart-per-acre rate to control crabgrass above the 90 percent level for four to six months in cool and warm-season turf from a single application," says Dr. Jeffrey Higgins, technical development manager for Dimension. "This length of control can be achieved at the usage rates currently listed on the product label."

Monsanto says Dimension is the first herbicide to combine preemergence and postemergence control. While most applications will be made preemergence, it can be applied early postemergence to crabgrass before it tillers if preemergence application isn't possible due to bad weather.

"This could be a big plus for lawn care companies with too many lawns to treat in the three to four-week preemergent window," says Dr. Nick Christians, professor of horticulture at Iowa State University. "Early postemergence applications of Dimension at ISU have provided up to 96 percent control of crabgrass that lasted into September."

This combination of long residual and early postemergence activity stretches the application window on both ends, so applicators can start earlier and go later with the same herbicide. For example, Dimension could be applied before the standard preemergence window and last all season. This is a special advantage in warm-season turf areas, where most of the early preemergence trials have been conducted.

But, if you've missed the preemergence season and have crabgrass in the two to three-leaf stage, Dimension will take it out early postemergence and give preemergence control the rest of the season, says Wallace Menn, who has worked with the product on established turf for several years at Texas A&M University. "Some other materials aren't effective if you haven't applied them before the seed emerges from the ground."

Season-long control

The primary focus of research on Dimension has been on its preemergence control of crabgrass species. Regional trials have shown preemergence crabgrass control consistently averaging above 90 percent at the recommended rate range of 0.38 to .0.50 lbs. a.i./acre (1 1/2 to 2 quarts per acre). Often, crabgrass control has reached 98-plus percent at those rates.

"In several of our preemergence trials, Dimension has been very active on smooth crabgrass," says Dr. Prasanta C. Bhowmik, associate professor of weed science at the University of Massachusetts at Amherst. In 1987 and 1988 trials, Dimension was still holding at the end of the season after being applied within the April 1 to May 10 window in Massachusetts.

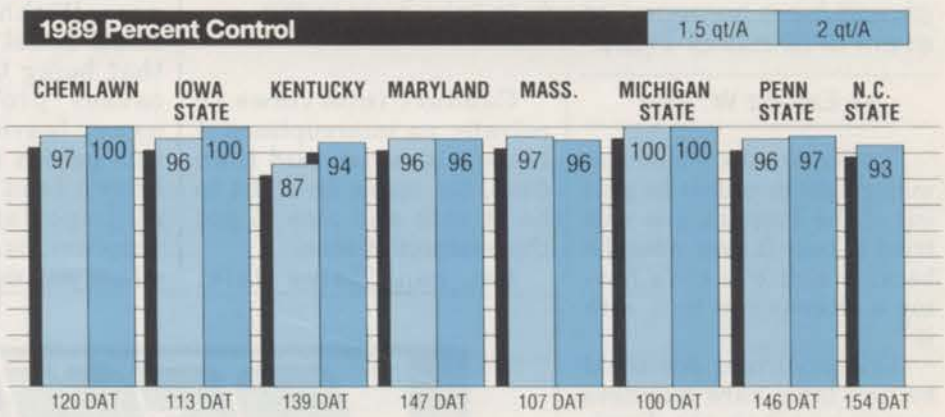
Bhowmik also found better than 90 percent control of crabgrass treated early postemergence in the one to four-leaf stage. However, control dropped significantly when Dimension was applied to tillering crabgrass. "The more mature crabgrass becomes, the higher the rate needed to get control," he stresses.

For control of crabgrass after tillering, Monsanto recommends a tank mix of Dimension with either MSMA or Acclaim* herbicides.

"From an efficacy standpoint, Dimension is equal to the best existing preemergent compounds—and that's a good position to enter the marketplace," says Dr. Tom Watschke, professor of turfgrass science at Pennsylvania State University. "The herbicide has performed well even if there's only a small amount of precipitation, with is different from other products."

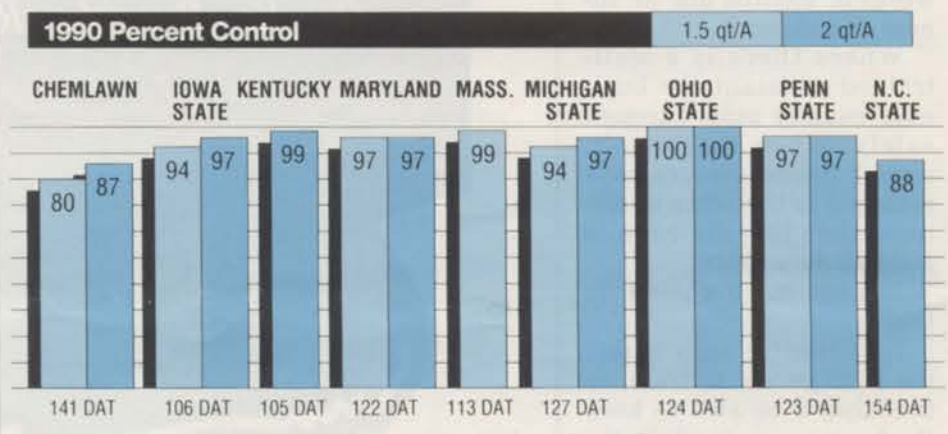
A key difference, Watschke adds, is the bonus early postemergence activity of Dimension. He has seen consistent control in early postemergence trials, with results com-

SEASON-LONG CRABGRASS CONTROL WITH A SINGLE PREEMERGENCE APPLICATION



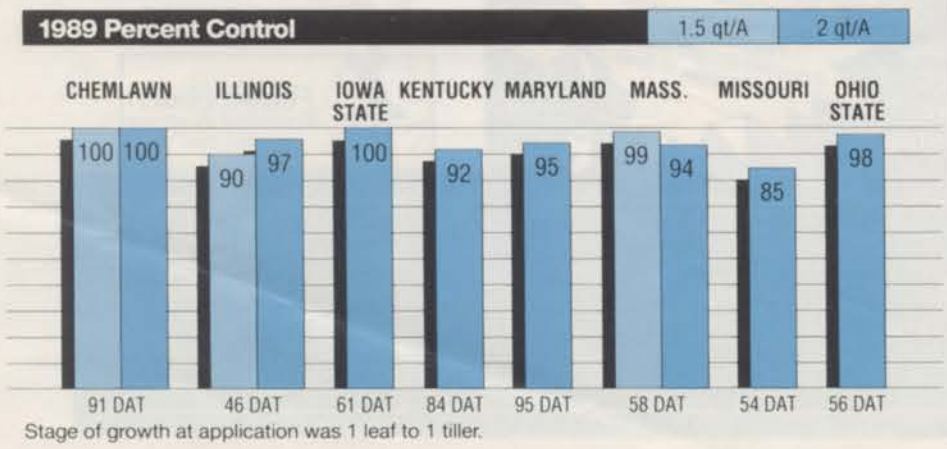
Data source for all graphs: University Annual Research Reports

SEASON-LONG CRABGRASS CONTROL WITH A SINGLE PREEMERGENCE APPLICATION



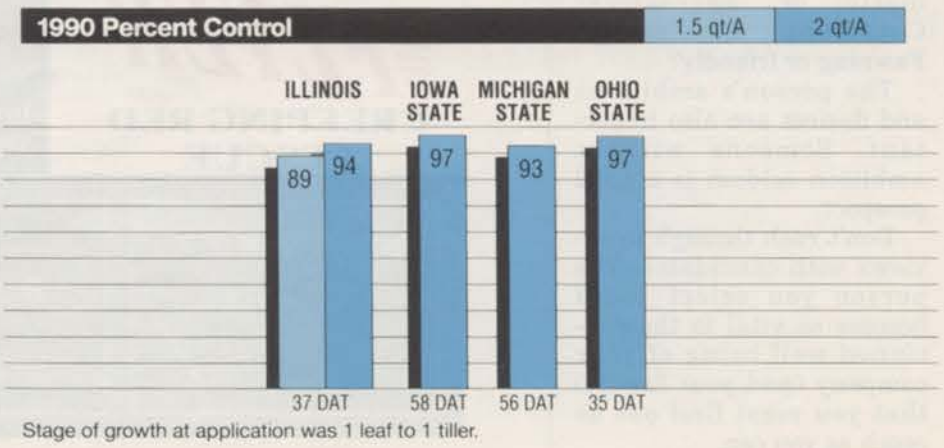
Data source for all graphs: University Annual Research Reports

POSTEMERGENCE CRABGRASS CONTROL WITH DIMENSION TURF HERBICIDE



Stage of growth at application was 1 leaf to 1 tiller.

POSTEMERGENCE CRABGRASS CONTROL WITH DIMENSION TURF HERBICIDE



Stage of growth at application was 1 leaf to 1 tiller.

parable to research nationwide.

Safe to turfgrasses

Says Dr. Jeff Higgins, Monsanto technical development manager, Dimension appears to have better overlap safety than other preemergence compounds. Most turf is not injured at the 2 lb. a.i./acre rate, while only 0.38 to 0.5 lbs. a.i. is needed for control. Cool-season species such as creeping bentgrass have escaped phytotoxicity at 1.5 lbs. a.i./acre, he says.

At Ohio State University, Kentucky bluegrass has shown good tolerance to Dimension at two to four times the recommended rates, says Dr. John Street, associate professor of agronomy, Extension. "Both Dimension and pendimethalin exhibit good safety at recommended rates, but Dimension shows better safety at higher rates," he explains.

In Massachusetts, creeping bentgrass has shown considerable tolerance to Dimension in Bhowmik's trials, even at 1 lb. a.i./acre. Injury began to appear at the 1.5 lb. a.i./acre rate. "Dimension is also safe to perennial ryegrass," Bhowmik says.

In Monsanto trials on warm-season grasses, spring greenup for Bermudagrass was about equivalent to pendimethalin when both were applied preemergence at recommended rates. According to B.J. Johnson, professor of agronomy at the University of Georgia, common Bermudagrass has shown good tolerance to 1.5 lbs. a.i./acre of Dimension—three times the normal application rate. "Spring greenup is delayed very little by Dimension," he says.

Tall fescue has shown "excellent tolerance" to Dimension in University of Georgia trials, while centipedegrass appears to be less tolerant above the 0.5 lb. a.i./acre rate, Johnson says.

Fits turf program

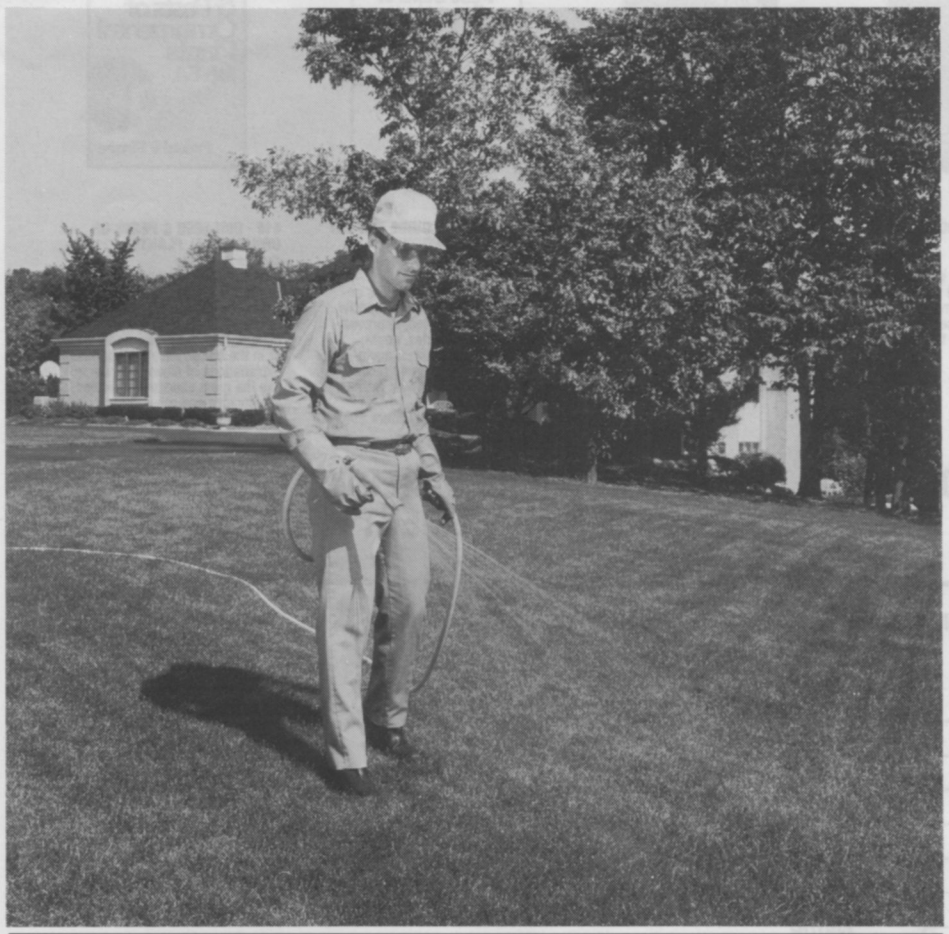
To date, no compatibility problems have surfaced with Dimension when combined with other turfgrass management practices such as fertilization, insect, disease and broadleaf weed control. The herbicide can be tank-mixed with common liquid fertilizers, herbicides, insecticides and fungicides. And, unlike some other postemergence turf herbicides, Dimension is not affected by temperature at application.

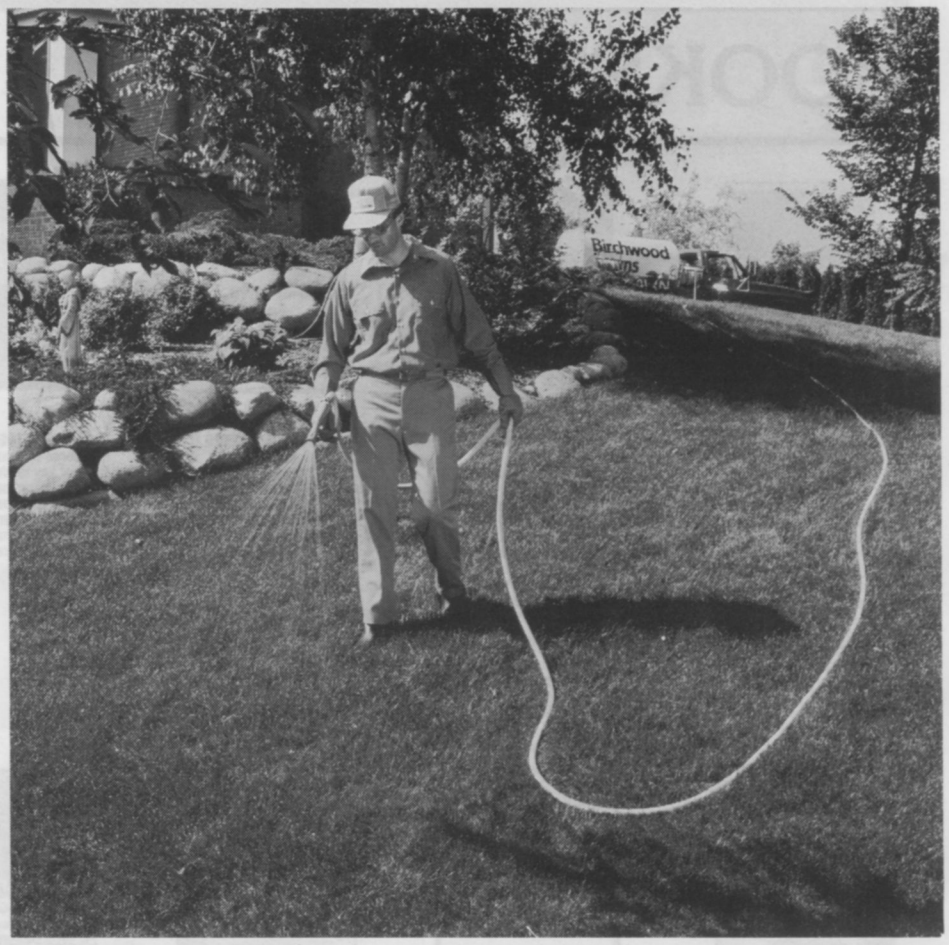
Dimension also suppresses or controls spurge, oxalis, foxtail, goosegrass and poa annual. Other labeled weeds include chickweed, crowfootgrass, henbit, purslane and smutgrass.

According to Monsanto, Dimension will not harm ornamental plants adjacent to treatment areas and won't stain desirable plant foliage, or sidewalks.

Prior to registration by the Environmental Protection Agency in June, Dimension had undergone several years of extensive laboratory and field testing. The product was released to major universities for testing in 1987 and was examined in commercial field trials across the country under an Experimental Use Permit for two years.

Dimension is a registered trademark of Monsanto Company. Acclaim is a registered trademark of Hoechst AG. LCI





Can a new product change the way an LCO manages? Product manager says "yes"

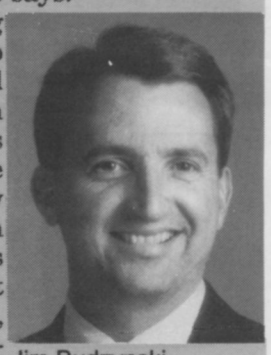
Herbicides offering both pre and early postemergence activity will change how LCOs operate, claims Jim Budzynski of Monsanto.

"We've kind of been in a mindset in this business—crabgrass control has always been done in the spring and broadleaf control later in the season. I think Dimension is going to change some of the assumptions that LCOs have had," says Jim Budzynski, product manager for Dimension, Monsanto's new crabgrass control product.

"A lawn care company can now put straight fertilizer down in round one to get greenup in the turf, and start to generate some cash flow," he adds. "What that company has done is to defer one of its more costly treatments until its business gets into full swing."

The reason why this is so, he insists, is because the activity of dithiopyr (the active ingredient in Dimension) allows turf managers to consolidate weed control applications.

"While some lawn care companies routinely make two preemergence herbicide applications, Dimension will allow them to spray just once for season-long control, particularly in the Midwest and Northeast.," he says.



Jim Budzynski, Dimension manager

By deferring weed control to the second application round, LCOs can continue to pick up new customers. In effect, claims the product manager, while the herbicide widens the crabgrass treatment window (because it has both preemergence and early postemergence control), the professional turf provider widens the LCO selling season.

"In some areas of the country, lawn care companies have stopped picking up customers when the crabgrass starts. That's because they can't get good control," he explains.

The product has other attractive features for turf managers, he says. It's virtually insoluble in water and immobile in soil and it stays on the soil surface where weeds germinate. LCI

Bug book revised; IPM info, photos

Insects That Feed on Trees and Shrubs, the second edition, revised.

The book is co-authored by Warren T. Johnson and Howard H. Lyon. It was first published in 1976, and the second edition (1988) has been revised and expanded.

Cornell University Press, 124 Roberts Place, PO Box 250, Ithaca, NY 14851. 607/277-2211. LCI

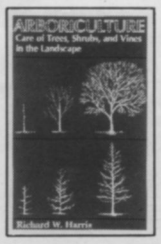
Biofertilizer rates tops in test

FAIRFIELD, IOWA—In a recent study at Rutgers University, TURFtech II biofertilizer was rated tops in a composite ranking of products tested for turfgrass quality and disease suppression, claims its maker Soil Technologies.

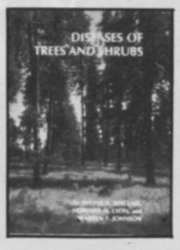
"This year's results show some significant differences between the organic nitrogen sources and we plan to continue this study during 1991 on the same plots," says Dr. David Thompson, co-author of the research. The 1991 tests will also analyze the moisture holding capacity of the plots.

The product consists of nitrogen-fixing cyanobacteria which are dried and packaged as a wettable powder. LCI

BOOKSTORE

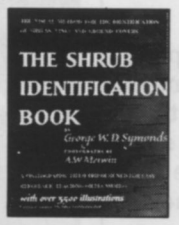


665 - ARBORICULTURE: THE CARE OF TREES, SHRUBS AND VINES IN THE LANDSCAPE
by Richard W. Harris
Provides comprehensive coverage of complete planting, site analysis, preparation and special planting methods, fully detailed coverage of fertilization, irrigation and pruning guidelines on preventative maintenance, repair and chemical control, how-tos of diagnosing plant problems, practical data on non-infectious disorders, diseases, insects and related pests and pest management. **$63.00**

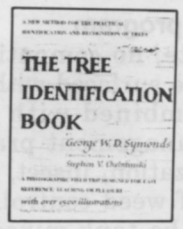


430 - DISEASES OF TREES AND SHRUBS
By Wayne Sinclair, Howard Lyon and Warren Johnson
A comprehensive pictorial survey of the diseases of, as well as the environmental damage to, forest and shade trees and woody ornamental plants in the United States and Canada. Reflects the most important developments in fungal biology and taxonomy, plant bacteriology, virology, and environmentally induced stress in plants. Summarizes information about newly discovered diseases and provides up-do-date accounts of old ones. **$52.50**

690 - INSECTS THAT FEED ON TREES AND SHRUBS
by Johnson and Lyon
Essential information for identifying more than 650 insect pests and the injuries they cause. More than 200 color illustrations. **$49.95**



720 - SHRUB IDENTIFICATION
by George Symonds
Pictorial key to identify shrubs. Contains more than 3,500 illustrations to check specimens. Popular and botanical names are given for each shrub and handy index tabs for quick reference.
$17.95



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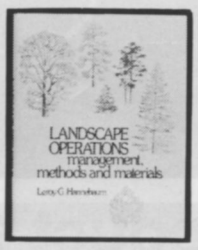

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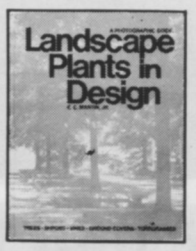

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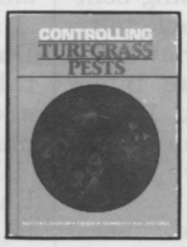

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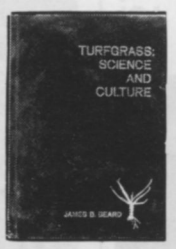

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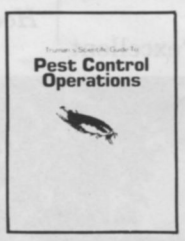

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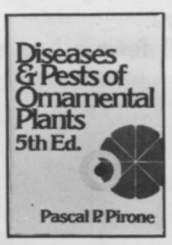

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LCOs can offer more environmentally aware fall fertilizing regimen

BY J. MARK NUZUM

Recent surveys show that more than 80 percent of Americans say they've changed their shopping and living habits in response to a growing concern for the environment.

Nearly the same number of Americans now consider themselves "environmentalists". This signals dramatic changes in American purchasing habits.

Environmental concern is leading homeowners to insist on less toxicity in their lawn care products. Also, increased government regulation of lawn chemicals is expected to continue and spur the development and use of more environmentally compatible products, especially those made from recyclable materials.

New challenge

The new challenge for lawn care operators (LCOs) is to incorporate environmental practices into everyday operations while continuing to provide the green, healthy carpets of lawn that homeowners still demand.

One area LCOs are focusing on is fall fertilization, a standard practice in the lawn care industry in recent years. It promotes the health and vigor of turf and provides nutrients for root growth. It also keeps lawns green later into fall and provides a head start for spring green-up.

Just enough nitrogen

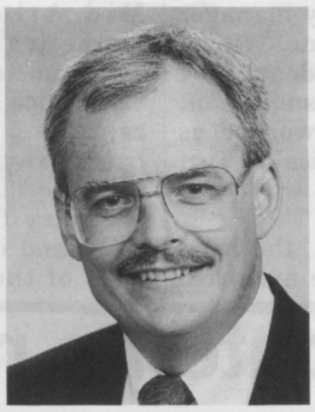
The environmental impact of fall fertilization is a particular concern for LCOs. Lawns in a dormant to semi-dormant late-season state grow more slowly. Plants absorb fewer nutrients from the soil, and water-soluble nitrogen is often not completely absorbed.

Fall rains cause the unused, excess nitrogen to leach out of the root zone. This can contribute to ground and surface water contamination. Excess nitrogen released this way into the environment can cause algae build-up in watersheds, smothering streams and lakes and robbing fish of oxygen.

From a practical standpoint, the presence of water-soluble nitrogen in the environment represents an uneconomical use of fertilizer.

Bridge products

To help LCOs meet consumer demand for both environmental stewardship and a verdant suburban landscape, a new category of fertilizers—bridge products—is being developed. Bridge products, as the name suggests, provide a link between traditional all-synthetic fertilizers and all-natural fertilizers.



Because of their high analysis, bridge products are effective, and offer both immediate and long-term benefits for soil and turf. They're particularly well suited for fall fertilization.

Organic materials used as fertilizer bases provide an energy source for soil microorganisms—J. Mark Nuzum, president of Harmony Products

Bridge products supply all the safety and benefits of natural fertilizers without sacrificing the high nitrogen analysis and low cost of synthetics. They're also pleasant to use, and are low in odor and dust.

They're manufactured in a homogeneous particle form for easy and even spreading, and are generally marketed at prices that are competitive with traditional synthetics.

Bridge products provide a combination of water-insoluble nitrogen (WIN), quick-release nitrogen and organic material to create optimum soil conditions for the fall and winter lawn.

Slow-release a benefit

The long-term benefits of bridge products lie in the slow-release WIN which breaks down gradually through microbial activity and thus does not leach excessive nitrogen.

If temperatures drop below those required for organic break down, unused WIN is stored in the soil until spring brings a resumption of microbial activity. These stores of nitrogen and other nutrients enhance spring root growth and promote early spring green-up.

Year-round nourishment

Organic materials used as fertilizer bases provide an energy source for soil microorganisms that enable them to continue their soil-building activity. A fertilizer rich in energy and nutrients helps build and sustain a healthy soil environment, nurturing turf over the winter and fortifying the soil and turf for quick spring green-up.

A two-year study by Dr. Charles Peacock, associate professor of crop science at North Carolina State University, found that bridge products are "effective fertilizers" in this regard.

Used in conjunction with a good integrated pest management (IPM) program, bridge products can rebuild soil quality and lead to self-supporting, robust turf that is less dependent on chemical inputs over the entire growing season.

Harmony Products manufactures fertilizer from poultry by-products that would otherwise by burdensome disposal problems. Harmony's basic professional lawn product is a 14-3-6 fertilizer.

J. Mark Nuzum, is president of Harmony Products. He's an agronomistwith lawn care experience at Rollins Lawn Care, Tidewater Agricorp Inc., Lebanon Chemical Corp. and Nitrex.

Generosity of retired Davey Tree executive births new hort program

The generosity of a retired Davey Tree executive spurred the creation of a two-year Horticultural Technology program at a major Ohio university this fall.

The program at Kent State University's Salem campus results from a $500,000 gift of Davey Tree Company stock from **Eugene Haupt**, recently retired president of the Davey Tree Surgery Company, Livermore, CA.

"This singular gift is extraordinary in its generosity and signals a major commitment to quality education at Kent State University," said **Dr. J. Robert Quatroche**, vp for institutional advancement at Kent State

The donation was made in the names of Haupt and his late wife, Betty.

In addition to Haupt's gift, Davey will provide $25,000 in scholarship funds to the program over the next two years. **Ward Peterson**, manager of Human Resources at the company, says firms involved in all facets of the green industry report an urgent need for highly skilled employees. He said Davey Tree will be looking to hire as many graduates of the Kent State U. program as possible. Graduates of the program will receive an associate of applied science degree.

The Davey Tree Company has its international headquarters in Kent, Ohio.

Stephen A. Hardymon, resigned as a director of the Professional Lawn Care Association of America (PLCAA) in mid July. Hardymon also reportedly left ChemLawn. He had been the company's vice president of public affairs.


Stephen Hardymon

PLCAA President **Neal DeAngelo** appointed **Norman Goldenberg**, vice president of government affairs for TruGreen Lawn Care, to replace Hardymon as chairman of the PLCAA Legislative Affairs Committee. Goldenberg, a former president of the National Pest Control Association, and long active in Florida and national politics relating to chemical application, will act as liaison between PLCAA and its federal issues presence, Capitoline Consultants, Washington, D.C. Goldenberg owned and operated a pest control/lawn care business in Miami, FL, before it was purchased by Waste Management.


Norman Goldenberg

Replacing Hardymon on the PLCAA board is **Thomas F. Murrill**, vice president of Human Resources and Administration, ChemLawn.

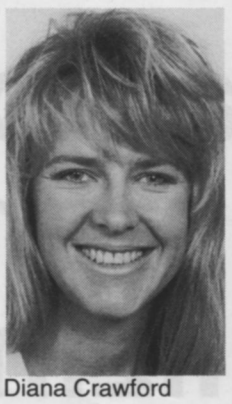
Irvin E. Aal was named president, Ransomes America Corporation, Lincoln, NB, in July. This is a newly created position. The Ransome companies include Ransomes Inc., Cushman Inc., Steiner Turf Equipment, Brouwer Turf Equipment and Supreme Mowing.

Aal previously held the following positions: vice president of Sperry New Holland, president of International Harvester's Agricultural Equipment Group, president/CEO of Steiger Tractor, Inc., and CEO of Phoenix International Corporation.

Monsanto Residential Products Division, St. Louis, appointed **Drew Lillie** as regional marketing supervisor for the Southwest Region. Products. The residential products portfolio includes ready-to-use formulations of Roundup®, Greensweep® and Pondmaster®. Lillie will live in Dallas. **Patrick M. Quinn** also joins the residential products division.. He's a marketing specialist and lives in St. Louis.

Gary McElvaney became specialty products territory manager for Vigoro Industries, Inc. Winter Haven, FL.. A past president of the Texas Turfgrass Association, McElvaney previously worked as sales manager for Chemical & Turf Specialty Company. He will work out of Austin, TX.

Brickman Group Ltd., the huge design-build landscape architecture/horticultural management company, Long Grove, IL, named **Diana Crawford** as a project director. She's a native of Indianapolis and a landscape architect.


Diana Crawford

Joseph Cortopassi was promoted to vice president of Green Turf Irrigation, CO., St. Louis, MO. Cortopassi was the company's general manager. He's been with Green Turf Irrigation for 15 years. He's also the president of the Gateway Irrigation Association.

Rain Bird, Glendora, CA, named **Rick Davis** as national specifications sales manager. He's a certified landscape architect with 17 years experience in irrigation. The company hired **Douglas H. Callison** as specifications manager for northern California, northern Nevada, Oregon and Washington.


Vanessa Jensen

Vanessa Jensen joined Turf-Seed, Inc., Hubbard, OR, as Mid-Atlantic marketing manager and technical service representative. She's been involved with the turfseed industry for 19 years and is immediate past president of the Maryland Turfgrass Council.

The new officers the Illinois Landscape Contractors Association: president **Frank Mariani**, Mariani Landscape; executive vp **Scott McAdam**, McAdam Landscape; vp **Scott Byron**, Scott Byron & Company; treasurer **Cheryl Muskus**, C&J Landscape; secretary **Herb Buhr**, Buhr's Landscaping & Lawn Care; sergeant-at-arms **Cathy Ricciardi**, Interior Garden Services.

ILCA directors: **Bob Busch**, Busch & Sons Landscape Construction; **Gene Grant**, Grant & Power Landscaping; **Leo Kelly**, Kellygreen Design; **Chuck McGinty**, McGinty Bros.; **Sue Meier**, Ada Tecza & Sons; **Eric Moore**, Moore Landscapes; **Tom Nenoff**, Assurance Agency; and **Michael Pezza**, Pezza Landscape.

William (Bill) G. Thornton, Jr., Thornton Landscape, Inc., Maineville, Ohio, is a new director of the National Federation of Independent Business (NFIB). Thornton is president of Thornton Environmental Industries, parent company of six smaller firms in the landscape/nursery business. He's a former president of ALCA.

The California Landscape Contractors Association named **Eldon Dryer** as a "Life Member" this, owner of D&L Landscape Corporation, Riverside, CA, joined CLCA in 1963.

Pamela A. Prust joined ISK Biotech Limited, Mentor, Ohio, as office administrator. She works out of the London, Ontario, office.

James A. Councilor now heads the Chemical Specialties Manufacturers Association's Department of Administrative Services. He was formerly with the COffee Development Group. He's a native of Washington, D.C. He succeeds **C.L. (Connie) Horton**, who retired after 10 years with CSMA. LCI

Biosys patents nematode process

PALO ALTO, CA—Biosys received a U.S. patent for mass production of insect-killing nematodes.

"This is the first patent to cover a process that enables production of this highly effective biopesticide economically in commercial quantities," says Dr. Venkat Sohoni, president and CEO of Biosys.

The company markets nematode-based products for agriculture, commercial turf and home markets, both directly and through partners, such as Ciba-Geigy.

The patent is the first for production of multicellular invertebrates in fermenters. It couples an enhanced media emulsion with other techniques to accelerate the nematodes' growth.

Nematodes are microscopic organisms that seek out and destroy soil pests. They invade and kill a wide range of grubs, cutworms, armyworms and other larvae. Nematodes reproduce inside the dead insect, then emerge to destroy others in the ground.

Ciba-Geigy markets the nematode-based product as Exhibit®. LCI

BASF readies low-atrazine product

RALEIGH, NC—Prompt™ herbicide is now registered by the Environmental Protection Agency and labeled for use on turf.

BASF Corporation says the product is a low-atrazine alternative that provides broad-spectrum weed control. It can be applied on established and newly established St. Augustine grass, zoysiagrass, and centipedegrass as soon as 10 days after sprigging or plugging.

Prompt, with active ingredients bentazon and atrazine, is labeled solely for turf and takes the place of Laddok® herbicide from BASF.

Terry Hanson, business manager for the Specialty Products team at BASF, says the herbicide is effective on nearly two dozen annual broadleaf weeds in addition to tough perennial weeds such as yellow nutsedge and Canada thistle.

Prompt is restricted use. LCI

Pacific NW meeting

Portland, OR—Interstate Professional Applicators Association Convention and Trade Show, Red Lion Hotel—Columbia River, Oct. 2-4.

Contact: John Landon 503/656-2656. LCI

Deere creates new lawn/grounds division

MOLINE, IL—Deere & Company this summer created a Lawn & Grounds Care Division.

Bernard L. Hardiek, senior vice president, will direct it.

Hardiek said the company's growth in homeowner, commercial and golf and turf markets "continues to match or exceed the company's objectives" with over 3000 lawn and grounds care dealers in North America.

The products of the division are manufactured at the division's primary facility in Horicon, WI, and also at new facilities in Greeneville, TN, and Augusta, GA.The division also recently hired a national marketing organization in Raleigh, NC.

Lessen chances for turf-damaging disease in new turf plantings by following a plan

Symptomatic foliage discoloration and kill in ryegrass due to *Fusarium.*

Turfgrass is an amazing plant. Its beauty graces millions of acres of landscape across America. We walk on it. We play on it. We plant it, water it and expect it to grow. But, more than anything else, we take it for granted.

The fact is, there are lots of unseen influences that can greatly affect the growth and stand of turfgrass—unseen foes like soilborne fungi that can cripple or kill turfgrass throughout its growth cycle.

Because turfgrass proliferates in warm, moist environments of nutrient-dense soils and because it encompasses a large percentage of golf course and recreational areas, it becomes easy prey for disease pathogens that are most active under the same types of conditions—especially at planting and during early growth stages.

That's why a preventive program of integrated control measures, including seed treatments, is important to turfgrass development.

Common diseases

A broad spectrum of soilborne fungal microorganisms can affect turfgrass development: Pythium, Rhizoctonia, Fusarium, Helminthosporium, Sclerotinia and Septoria all infect turfgrass.

Phythium is the most common fungus that affects turfgrass development. Other diseases may be blamed for damping off or uneven stands of young turfgrass, but research shows Pythium is the most likely culprit for fungal-related turfgrass damage.

Pythium is most active during warm, wet periods; Rhizoctonia prefers long periods of humid weather; Fusarium is favorable to cool, wet weather; Helminthosporium can develop in extended wet conditions; Septoria prefers cool, wet weather (primarily in the spring); and Sclerotinia appears during cycles of moisture with warm days and cool nights (spring, early summer and fall).

Cultural practices, imbalances of fertilizers, chemical controls and plant nutrients also can affect the presence or severity of fungal diseases.

How diseases work

In periods when there is no plant host (turfgrass), fungal organisms have the capability to survive temperature extremes and lay in wait for extended periods of time. Once seed is introduced and conditions favor fungal development, the disease pathogens can begin the infection.

During active periods, fungal diseases easily penetrate and infect the seed, roots, stems and foliage of turfgrass and rapidly reproduce by means of spores in the plant's tissues.

Depending on the length of activity and severity of the infection, the diseases can manifest themselves in a wide variety of symptoms or overall effects.

How to identify infections

In general, turfgrass varieties respond similarly above ground when they're diseased—the absence of, or weakened growth; dull, greasy or discolored foliage; and indicators such as spots, growths, rings or discolored foliage.

Pythium blights are among the most common and destructive of the disease complex. Grasses most commonly affected are bentgrasses, Bermudagrasses, fescues and ryegrasses.

Typically, Pythium infections first appear as small, irregularly shaped, greasy patches from four or five inches in diameter. These areas may eventually reach from one to 10 feet in diameter. Collapse of foliage and chlorosis also may be present, and a cottony growth may accompany the rings in early morning hours.

Below ground, infected turfgrass will most often show dark, discolored roots often accompanied by a rotted appearance. Other below-ground symptoms will vary depending on the particular fungus affecting the plant and the stage or severity of infection.

Consult with a knowledgeable source, perhaps a county extension agent, to correctly identify and treat disease problems, especially prior to curative treatments.

Control measures

There are no magic treatments available for turfgrass disease control. Rather, an integrated risk management program including preventive seed treatments can optimize controllable growing variables and lessen the risk of disease infection later in the growth cycle.

Planting conditions and proper germination are critical to the development of a good turfgrass stand—a healthy stand, in itself, is a good defense to diseases. A combination of cultural and chemical control practices at early stages can aid turfgrass establishment in areas that are newly seeded or over-seeded:

- For newly seeded areas, seedbed preparation is important—evaluate soil components and fertility factors, consult and follow recommended procedures for your area and avoid excessive use of fertilizers or herbicides.

If necessary, alter the soil make-up and landscape to provide good drainage. Sand/soil mixes tend to have fewer problems than natural soils.

- Fall overseeding procedures can differ from area to area, but general guidelines apply. Most importantly, *plan ahead* to control weeds, thatch and disease.

If there is evidence of disease in areas to be overseeded, treat with a fungicide at least two weeks prior to overseeding. By applying a fungicide at this stage, fungal disease inoculum existing in the soil can be controlled and risk of infection diminished during the critical early stages of growth. Systemic fungicides (fungicides that translocate throughout the plant's system) typically offer longer and more complete protection than contact fungicides.

About two weeks after overseeding, make a second application of fungicide. Follow label directions for timing and recommended rates.

Weed and thatch control are also important to successful overseeding. Take early control of weeds and thatch. They can interfere with seed-to-soil contact and aeration which aid a good start for turfgrass stands. Incorporate adequate pre-seeding lead time for herbicides and fertilizers to help avoid problems during germination.

Other practices such as verti-cutting and double-cutting Bermudagrasses immediately prior to over-seeding can improve seed-to-soil contact.

- Choose a turfgrass variety appropriate for the area to be seeded or over-seeded. Consult with a turfgrass distributor's seed specialist for recommended varieties and uses.
- Use high-quality seed treated with a systemic fungicide.

Seed treatments can help provide protection in the most critical stages of turfgrass development—germination and emergence. Systemic fungicides can extend early-season protection beyond germination into the seedling stages. Once a healthy stand is established, chances of disease infection are lessened.

As part of an integrated approach, follow-up application of a foliar systemic fungicide at green cast (about two to three weeks after seeding) can extend Pythium control even further into the growing season.

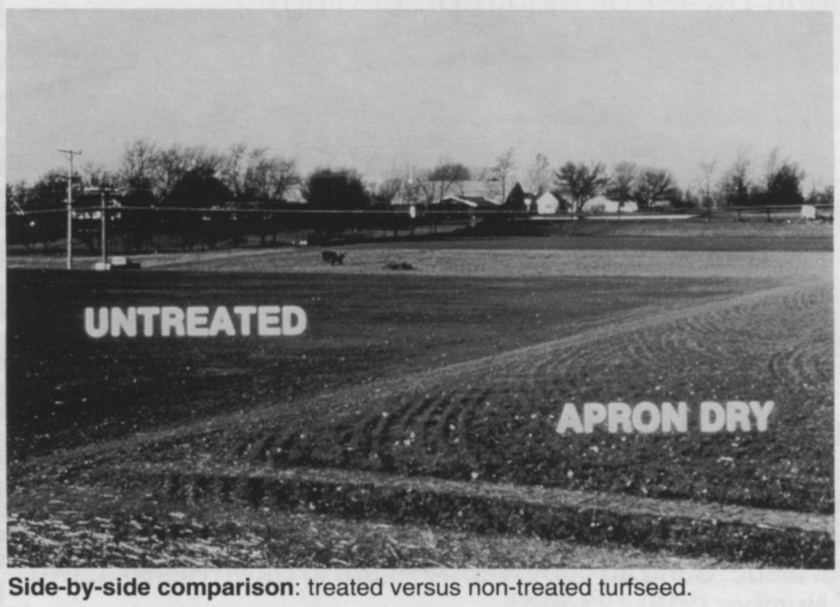
- Plant or overseed at recommended seeding rates but be flexible on planting dates. Consult extended forecasts so that seeded areas are likely to get the conditions they need to germinate. Follow-up applications of fertilizer and/or fungicides may be necessary.
- Post-seeding maintenance: Carefully structure a watering program appropriate to turfgrass demands. Because moisture is critical to both turfgrass growth and fungal disease infection, closely monitor moisture levels under the soil line and watering intervals.

Cutting and traffic also can affect the vigor of a turfgrass stand.

Monitor turfgrass conditions by randomly checking plants throughout an area. Leaf and root conditions are normally the first indicators of disease infection. Laboratory soil and plant sample evaluation can also indicate imbalances in fertilizer and chemical control use. At the first indication of disease, follow procedures to correctly identify and control fungal disease pathogens.

An integrated risk management program can be a key tool for turfgrass disease control. Early implementation of preventive measures include cultural practices, seed treatments and growth monitoring. This will help give new and overseeded varieties a good start.

LCI



Side-by-side comparison: treated versus non-treated turfseed.

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HELP WANTED

COMMERCIAL/RESIDENTIAL SALES MANAGER: New position with 15 year old local company. Assertive, self-starter with 2 years minimum commercial lawn & tree sales experience. Want a change? With right background, this could be the ticket to future success. Send resume & salary requirements to: Bill Harrigan, **Green Life Lawn & Tree Care,** 4539 Mack Avenue, Frederick, MD 21701. 9/91

LAWN CARE MANAGER: Full-time, year-round position for an aggressive career-minded individual. 2 years minimum experience in chemical lawn care with supervisory experience. Responsibilities will include crew training, supervision, customer communications, new program development & equipment care. Send resume with photograph and salary requirements to: P.O. Box 7055 West Station, Huntsville, Alabama 35807. 9/91

BRANCH MANAGER- Well established major company expanding in Midwest and Eastern cities desires ambitious, hands-on branch manager. Must have successful telemarketing experience in lawn care and be able to motivate both telemarketing and production employees. We care about our employees and offer high salaries and good benefits. Reply to LCI Box 234. 11/91

FOR SALE

HANNAY HOSE REELS: New in the box. E1526's and E1530's - **$359.** We will ship and pay freight anywhere in the U.S.A. and Canada. Immediate delivery. Other size reels and parts available at fabulous savings! Call 313-543-2200, in Michigan. Outside Michigan - **1-800-843-LAWN.** TF

KELWAY® professional **SOIL ACIDITY** and **SOLUBLE SALTS TESTERS,** available from distributors nationwide. HB-2 and SST brochures from **KEL INSTRUMENTS CO., INC.,** Dept. 2, P.O. Box 2174, Vineyard Haven, MA 02568. (508)693-7798. 11/91

Big savings on replacement parts for your commercial mowers. Blades, belts, tires, wheels, trimmer line, air filters and more! Call **LESCO** to order or ask for a free catalog (800)321-5325. 10/91

FOR SALE: Lawncare business in Northern California. Gross sales of $115,000 in 1990 from 300 residential/commercial accounts. Expansion could include maintenance. Distributorship for Northern California also for sale. Opportunities for growth are unlimited. 415-790-0300 evenings. 9/91

Newbury, Ohio-5 Acres, zoned commercial, landscape business, 2 homes, 3 bay garage, retail shop and office, pond, great visibility and potential. Call for details: Faith A. Osborn, Smythe, Cramer Co. Realtors, 216-247-8900 or 216-953-5356. 9/91

REPS WANTED

LAWN CARE FIELD REP: The nation's largest lawn care franchisor is expanding its field support program and needs an additional Field Representative to be based in New Jersey. Must have strong people, communications and sales skills. Turf experience required, knowledge of ornamental a plus. WRITE ONLY, including experience and salary history: Ewald Altstadt, Lawn Doctor, Inc., P.O.B. 512, Matawan, NJ 07747. 9/91

TREE SPRAYING TRUCKS FOR SALE. Can also be used for lawn spraying. 2-1990 GMC 5000 Series (Isuzu), Cab Over, Power Steering, Diesel, 5 Speed, 14 Foot Flat Bed, 1,000 Gallon Tank, Hypro 44 Gallon Per Minute Pump, 30 Horsepower Wisconsin Industrial Engine, Hannay Hose Reel, 300 Foot 3/4" Hose, John Bean 785 Spray Gun. Also Second Pumping System Hypro 10 GPM Pump, 11 Horsepower Honda Engine, Small Hannay Hose Reel, 250 Foot ½" Hose, Deep Root Feeding Gun and JD9 Gun. $24,995 Each Truck (Cost $40,000 New). 1984 GMC 6000 Series, 350 V8, 4 Speed, Power Steering, 14 Foot Flat Bed, 6 New 8:25x20 Tires, 48,000 Original Miles (Original Owner), 1,000 Gallon Tank (New), 44 Gallon Per Minute Hypro Pump (New), 23 Horsepower Kohler Engine, Hannay Hose Reel (New), 300 Foot 3/4" Hose (New), Bean 785 Spray Gun, New Paint on Cab. Excellent Condition. $8,995. 1982 Ford F600, 370 V8, 4 Speed, 2 Speed Rear Axle, 14 Foot Flat Bed, Power Steering, FMC Bean Tree Spraying Machine, 35 Gallon Per Minute, Wisconsin Industrial Engine, 600 Gallon Tank, Hannay Hose Reel, 300 Foot 3/4" Hose, Bean 785 Spray Gun. Approximately 46,000 Miles. Excellent Condition. $8,995. 2-1990 Dodge D350's 4 Speed, V8, 12 Foot Flatbed, 500 Gallon Poly Tank, Hypro 44 Gallon Per Minute Pump, 30 HP Wisconsin Engine, Hannay Reel, 300 Ft 3/4" Hose, Bean Gun. Also Second Pumping System Hypro 10 GPM Pump, 11 Horsepower Honda Engine, Small Hannay Hose Reel, 250 Foot 1/2" Hose, Deep Root Feeding Gun and JD9 Gun. $16,995 Each Cost $30,000 New! **CALL NOW! - PRICES NEGOTIABLE. Photos Available Upon Request. (516) 331-4713 Evenings & Weekends, (201) 785-0985 Monday-Friday Days.** 9/91

BUSINESS OPPORTUNITIES

SALE LAWN CUTTING AND SPRAYING: Grossing over $2,000,000. Hard assets exceed $500,000. Estbl. long term commercial accounts. H.O. in West Central Florida. Frank Antoniello 813-791-4419. **FLORIDA BUSINESS GROUP, INC.** 9/91

SERVICEMASTER LAWNCARE FRANCHISES IN INDIANA. FOR MORE INFO CALL 812-372-7803. 9/91

ADVERTISERS INDEX

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This index provided as an additional service. The publisher assumes no liability for ommission or error.

send a classified advertising message...

...write here.

(Please Print)_____

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1. Number of insertions: (circle one) 1 2 3 6 9 12 TF (Til Forbid)
2. Start with (month) _____ issue (Copy must be in by 1st of month preceding)
3. Amount enclosed: $_____

PAYMENT MUST ACCOMPANY ORDER.

SIGNATURE _____ DATE_____

NAME _____ COMPANY _____

STREET _____

CITY _____ STATE_____ ZIP_____

PHONE NUMBER _____

MAIL AD COPY TO: Dawn Nilsen, Lawn Care Industry, 1 East First Street, Duluth, MN 55802.
RATES: 1.05 per word (minimum charge $40). Boldface words or words in all capital letters charged at $1.30 per word. Boxed or display ads: $90 per column inch for 1x insertion (minimum one inch); $85 for 3x insertion; $80 for 6x insertion; $75 for 9x insertion; $70 for 12x insertion. (Frequencies based on a calendar year). Agency commissions will be given only when camera ready art is provided by agency. For ads using blind box number, add $20 to total cost of the ad per issue. Send ad copy with payment to Dawn Nilsen, Lawn Care Industry, 1 East First Street, Duluth, MN 55802. (218) 723 9179. FAX Number (218) 723-9615.

NEW PRODUCTS

Scott fungicide comes with a new carrier

Fungicide X combats prevalent diseases on high-maintenance turf areas, says O.M. Scott & Sons Company. Due to a new pulp carrier, Fungicide X provides optimum turf coverage and disease control with less susceptibility to drift while preventing and controlling brown patch, leaf spot, red leaf spot and Fusarium patch/pink snow mold.

Dry-applied and ready-to-use, Fungicide X can be applied with a rotary or drop-type spreader.

Circle No. 150 on Inquiry Card

Sidepour dispenser has many advantages

Even spreading of Ciba-Geigy's new Sprint® 138 for correcting iron-deficient soils is an easy matter with Magenta Corp.'s one-piece Sidepour dispensing closure.

The adjustable spout, which contains baffles that control the application swath, opens to three separate positions.

Sidepour is available in a variety of colors, with or without liners, from Magenta Corp.

Circle No. 151 on Inquiry Card

New line of natural organic fertilizer

Enviro-Gro Technologies unveils a new line of natural organic fertilizers called Terrene. Terrene's slow-release granules deliver a high percentage of its nitrogen as water insoluble (WIN). The product also features a very low burning potential, micronutrients and a large amount of needed organic matter.

Circle No. 152 on Inquiry Card

New Tiger Line trailer has wooden sides

Tiger Line's general purpose utility trailer comes with removable wood sides and full fenders. It's 8'4" long and 5' wide and weighs 685 pounds. Options include electric brakes, drop axle, ramp gate, and jack and wheel.

Circle No.153 on Inquiry Card

Here's a quicker way to bag yard wastes

Pfister Enterprises says its Quicker Packer® is a better way to collect and pack yard waste. It consists of a round anchored, funnel-shaped receptacle on which is stored a 25-foot tubular sleeve of cotton netting called Bionet®, and a long-handled dual-purpose tool which a standing operator uses to both rake and drive materials into the Bionet.

Circle No.154 on Inquiry Card

Finn's Fiber·Plus improves germination

The Finn Corporation's Fiber·Plus improves seed germination. It's a specially coated synthetic fiber which improves the bond of fiber mulch to the soil surface. When a slurry containing Fiber·Plus is applied the longer length fibers attach to the soil particles and create a tenacious erosion-control mat.

Circle No.155 on Inquiry Card

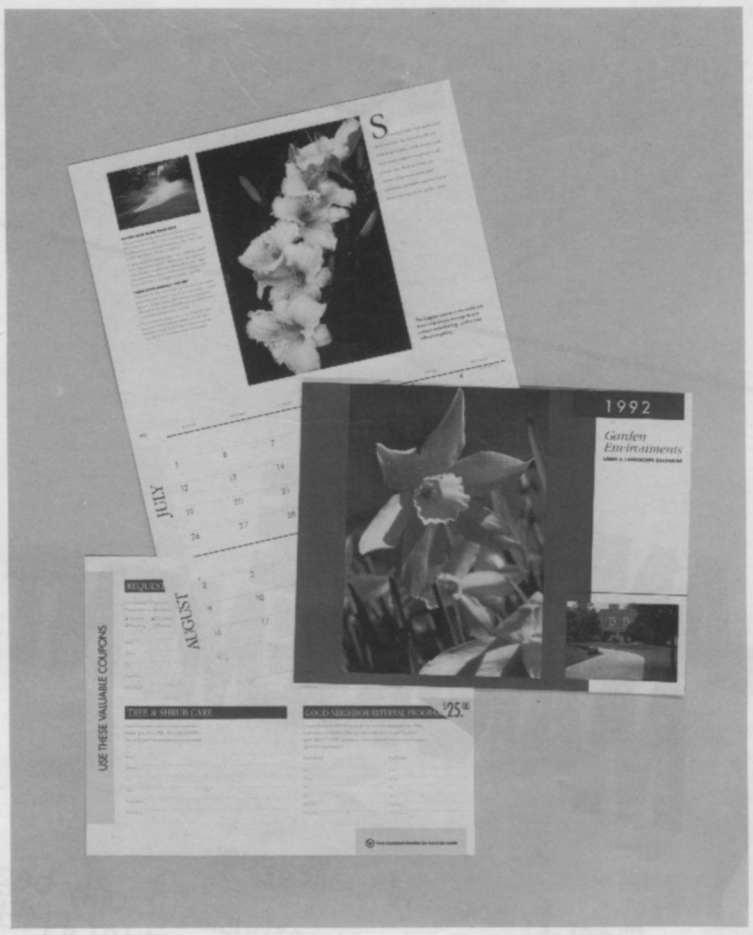
This sprayer attaches to a garden hose

The Porta-Spray does the work of a truck-mounted spraying system, says Chemilizer Products.

It can be used with all types of liquid and soluble-powder fertilizers, pesticides, algaecides and other chemicals.

It attaches to a standard garden hose and mixes chemicals and water as it's used.

Circle No.156 on Inquiry Card

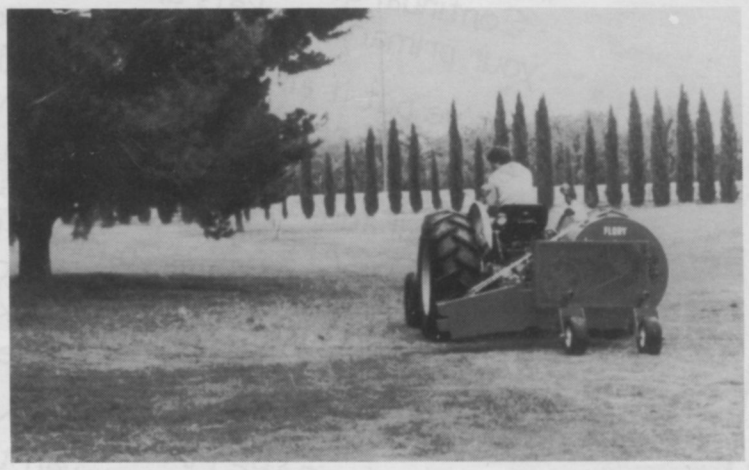


Colorful calendar can be given to customers

Focal Point Communications offers a calendar exclusively for the green industry. It's produced on high-quality recycled paper and features full-color photos. On the back cover are perforated coupons customized for each order to work year round for the company distributing them.

Lawn and landscape tips and cultural practices are featured in the calendar and your company name is prominently displayed on an outside tab, visible all year. There is an Oct. 15th cut-off date for December delivery. Call 1-800/525-6999.

Circle No.157 on Inquiry Card



Flory touts its new powerful blower

Flory Industries introduces a tractor-powered 2500 Blower. This model provides the power necessary for high-capacity cleaning of many materials.

It is controlled with a damper and cylinder which allows a variable amount of air without effecting the RPM of the power source. The 3-point hitch and drive shaft hook-up allow one man to easily connect it.

Circle No.158 onr Inquiry Card

Video journal helps green pros do the job

"For Every Season" is the first green industry video journal that provides ongoing training in pesticide safety and horticultural practices to lawn care, landscape and grounds maintenance workers.

Each 20-minute tape presents practical, step-by-step demonstrations of lawn and landscape techniques, equipment selection, and proper use of plant material along with management tips to increase efficiency. The tapes help industry professionals train and document their training.

Mark Timmons and Meg Southerland, well-known industry consultants are featured on each tape.

For more information contact "For Every Season:" Video Landscape Journal, 105 Lyndon Lane, Louisville, KY 40222. 502/425-8121.

Circle No.159 on Inquiry Card

CALL US NOW FOR More Information On The New LANDSCAPE MANAGEMENT

SOUTH
3475 Lenox Road, N.E.
Suite 665
Atlanta, GA 30326
(404) 233-1817

MIDWEST
7500 Old Oak Boulevard
Cleveland, OH 44130
(216) 826-2856
FAX: (216) 891-2675

WEST COAST
1515 N.W. 51st Street
Seattle, WA 98107
(206) 783-0549
FAX: (206) 784-5545

LANDSCAPE MANAGEMENT

Dear Friend and Colleague:

Excited, eager and enthusiastic only begin to express how I feel about LANDSCAPE MANAGEMENT's upcoming October issue, and every issue to follow. This premier issue is the result of our desire to be your print vehicle of choice, and to support this desire with research and reinvestment that will meet your needs:

- Extensive, high quality research among green industry professionals (not just LANDSCAPE MANAGEMENT's readers) asking them what they desire most from an industry magazine and what editorial information was of greatest value to them.
- Continual questioning of you — a major supplier to the green industry — asking what your primary markets are.

We've put it all together in an exciting package...Editorial that fits exactly with the expressed needs of the green industry...Superior quality circulation that directly reaches your target markets...Enticing graphic redesign...and rate protection for 1991! This all adds up to a substantial package that will ensure LANDSCAPE MANAGEMENT's status as your print vehicle of choice and magazine "business partner"...a compelling package that will make our readers stop and say "Hey, I have to read this, now!"...a high quality package that is a visual testament to our recommitment to the green industry.

LANDSCAPE MANAGEMENT: You'll appreciate the changes.
You'll like what has stayed the same.

Jon Miducki
Publisher
LANDSCAPE MANAGEMENT

LANDSCAPE MANAGEMENT — You'll appreciate the changes.

You'll like what has stayed the same.